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YMGI, Engineered Comfort Products for A Sustainable and Efficient Green World !

INSTALLER'S INSTRUCTION & USER'S MANUAL

DC INVERTER MULTIPLE ZONE (59) (2)
SYMPHONY CHOIR

OUTDOOR UNIT (CH)

⚠ WARNING

This product is designed and manufactured free from defects in material and workmanship for normal use and maintenance. Installation, operation, maintenance and service shall follow professional practices for regular cooling and heating equipment, NEC, State, City or Local Codes and related manuals from YMGI. Otherwise, damage to equipment or property and even injury to people may occur.
Installer: Currently licensed HVAC technician only. Read manual before installation. Fully fill in warranty registration card.
User: Keep this manual for future maintenance and service use.
Servicer: Use this manual for service reference.

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⚠CAUTION All Units Shall Be Installed by Experienced or Licensed Contractor Or Technician. Read Manuals before Installation.

⚠CAUTION Following NEC, State and Local Codes and Installation Instructions of All Units, Otherwise Unit Warranty Will Be Void and Serious Damage To People Or Property May Be Caused.

⚠WARNING YMGI Group Will NOT Take Any Responsibilities for Any Damage or Loss Due to Do-It-Yourself(DIY) self-installation and other Improper Installation or Operation or Natural Disaster.

⚠WARNING Don't Supply Power until All Wiring and Tubing and Checking is Completed. Ground the Unit Following Instructions and NEC, State and Local Codes.

⚠DANGER Connect All Wiring Securely. Loose Wire or Other Bad Contact May Cause Arc or Overheating and Fire Hazard.

Installation or Service Technician to Contact Manufacturer Technical Support
Toll Free Number: 1-866-833-3138 x 703
Email: techsp@ymgigroup.com

(For any abnormal or unit issues, end user needs to contact installation or service contractor to check the unit, before having them contact manufacturer technical support for technical diagnosis or trouble shooting help.)

LIMITED PRODUCT WARRANTY POLICIES

YMGI GROUP
Innovative, Competitive, Efficient & Convenient

LIMITED PRODUCT WARRANTY -STANDARD POLICIES

YMGI Group (YMGI) products are designed and manufactured free from defects in workmanship and materials for normal use and maintenance. YMGI products are designed and manufactured to the qualities to keep installer(s) and user(s) from any trouble and to bring total comfort to unit(s) owner(s) and end user(s).

YMGI warrants its products against any unexpected issues occurred to product itself, though designed and manufactured and expected to work much longer than the warranted period, **as follows:**

1. Five-year compressor and sealed system
2. One-year other parts
3. Ground shipping only

Above warranties valid only if all the following are satisfied:

1. The unit was fully installed by currently licensed HVAC technician(s), from beginning to completion.
2. The unit is installed per NEC codes and local codes.
3. The unit is installed following installation instructions coming with YMGI products, and/or provided by YMGI Group.
4. The unit is fully checked and tested by installer(s) to make sure installed unit functions as designed.
5. Correct operation of the unit is explained clearly to the owner(s) by installer(s).
6. All fields are filled or checked, signed and dated by both installer(s) and owner(s) on the **LIMITED PRODUCT WARRANTY REGISTRATION CARD.**
7. **Warranty Registration Card** must be mailed, **along with an Original Copy of Full System Installation Service Charge Invoice from the Currently Validly Licensed HVAC Technician Company,** within 7 calendar days after the original installation is finished or your NEW home (unit is not checked or used yet) is closed, whichever comes later, by the owner(s) to Warranty Department, YMGI Group, POB 1559, O'Fallon, MO 63366, USA.

A full copy of **Warranty Registration** Card and **Original Copy of Full System Installation Service Charge Invoice** must be kept by owner(s) safely along with other documents that come with the product.

No warranty may be valid if any one of above 7 conditions is not fulfilled. Warranty begins on the date of the original installation or the date of NEW home (unit is not checked or used yet) is closed, whichever comes later.

As its only responsibility, and your only remedy, YMGI will furnish replacement part only (no labor), without charge for the PART(S) and Ground Shipping ONLY, to replace any part found to be defective due to manufacturer's workmanship or materials under normal use and maintenance. Any part replaced pursuant to this warranty is warranted only for the unexpired portion of the warranty term applying to the original part.

This warranty does not apply to nor cover any other cost associated with the service, repair or operation of the product or the like.

Defective product(s) or part(s) must be identified by your installer, along with **YMGI Group-approved Service Center(s) or Technical** Support., whichever is available in the area where unit is installed. Final decision is made by YMGI Group. An **"YMGI Group Customer Service/Technical Support Form Daily Log Sheet"** must be filed properly for effective communication and/or file management purpose.

Warranty policy herein DOESN'T cover:

1. Any damage or repairs to properties and injuries to person(s) as an incident or consequence of faulty or improper transportation, installation, operation, maintenance, or service that ISN'T physically performed by YMGI Group.
2. Any damage caused by frozen or broken water pipes in the event of equipment failure, any damage or injury as a result of floods, fires, winds, lightning, accidents, corrosive atmosphere or other conditions beyond the control of YMGI Group.
3. Any damage resulted from use of components or accessories not specified, supplied or designated by YMGI Group.
4. Any damage because of failure to start due to interruption and/or inadequate electrical service.
5. Any products sold or installed outside the United States or Canada.
6. Any labor charge from your technician company during any stage of the installation or service, for any reasons.

Any damage due to service performed by third parties, it is the product receivers(s) or owner(s)'s responsibility to claim such damage resulted from these activities to the responsible party:

1. Transportation, installation and operation.
2. Normal maintenance and service as described in the installation and operating manual, such as cleaning of the coils, filter, cleaning and/or replacement and lubrication.

YMGI keeps on product improvement and such improvement is purposed to further benefit installers, owners, users and others. Such improvement or changes, even without notice, including but not limited to specifications, functions, appearance, sizes, packages or others, of the products are YMGI's sole right(s). These improvement or changes will not invalidate the limited warranty stated herein.

For further information about this warranty, contact Warranty Department, YMGI Group either by faxing to **(866) 377-3355** or by mailing to **Warranty Department, YMGI Group, POB 1559, O'Fallon, MO 63366, USA**

LIMITED PRODUCT WARRANTY REGISTRATION CARD

YMGI GROUP
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LIMITED PRODUCT WARRANTY REGISTRATION CARD / FORM

YMGI to Fill Top Portion, at Shipping, and Keep Copy A; Center Copy B for Installer to Fill and Mail back to YMGI; Bottom Copy C for Customer to Fill and Keep

For YMGI Use Only

The Company the Unit Was Sold Though: _____
Shipping Packing List Number: _____
Registration Card Serial No. _____

Did the Company Pay to YMGI: _____
HVAC Contractor/ Technician--Name _____
Date the Filled Registration Card YMGI Received: _____

Installation Invoice Attached to the Registration Card _____
Hired YMGI-Recommended HVAC Contractor/Technician? _____
Unit(s) Work Successfully (Yes/No): _____ Warranty Approved Warranty Denied

Outdoor Serial Number (One Outdoor Unit, One Registration Card/Form):

Indoor Serial Number: / For Multi Zone Units

Unit #1 _____ Unit #5 _____
Unit #2 _____ Unit #6 _____
Unit #3 _____ Unit #7 _____
Unit #4 _____ Unit #8 _____

Contact Where the Units are Installed:
Name: _____ Phone: _____ Fax: _____
Address: _____ Email: _____
City: _____ State (Province): _____ Country: _____

Contact of the Installing HVAC Contractor/Technician:
Technician Full Name (Print): _____
HVAC Technician's Company Name: _____
Address: _____
Currently Licensed or Certified HVAC Technician License or Certification Number: _____ License Approved or Certified by: _____
Official Phone # to Check the License Validity: _____

YMGI-Recommended Contractor/Technician:
Phone:Fax: _____
Email: _____
City:State (Province): _____

List for Installating HVAC Technician to Double Check Installation Quality, and Warranty Processing Purpose (if not filled by technician, or not filled fully, warranty will void)

1) Are you the only one to install whole system? If not, % of installation done by you (HVAC technician).
2) What had been done, prior to your arrival?
3) Did you read the User Manual and Installation Instruction, before you started the installation?
4) Who unpacked the unit and accessory boxes to check for damage?
5) Supply electrical power V/Ph/Hz measured at wiring terminal block of Indoor unit: outdoor unit:
6) Incoming electrical power V/Ph/Hz measured at terminal blocks of indoor unit: outdoor unit:
7) Wire gauge, length and terminal colors between circuit breaker/ disconnect switch to outdoor unit:
8) Wire gauge, length and terminal colors between each indoor and outdoor unit: Unit A Unit B Unit C Unit D...
9) The size of HVAC circuit breaker/fuse or disconnect switch to the outdoor unit:
10) Are the inter-connecting wires and copper lines between indoor and outdoor units installed/covered/protected by line set covers, or anything else?
11) What is the refrigerant pipe length between each indoor unit and the outdoor unit? Unit A Unit B Unit C Unit D...
12) Where is/are the indoor unit(s) located? Unit A Unit B Unit C Unit D...
13) What is the elevation difference between each indoor unit and the outdoor unit? Unit A Unit B Unit C Unit D... (indoor unit above outdoor unit +, below -)
14) Did you check the indoor unit for condensate leakage and refrigerant leakage, before and after connecting them?
15) Where is the outdoor unit located? Ground wall balcony roof other location or pad Is the outdoor unit anchored to ground or secured onto wall bracket?
16) Have you checked to make sure there is no cross-piping and no cross-wiring between any two indoor units (zones)? How did you do it, who was with you?
17) Were the refrigerant pipe ends capped or taped seal, prior to running them through structures to keep debris from entering the copper lines?
18) Have you checked and run cooling or heating, one unit by one unit, all working fine?
19) Did you charge the inter-connection copper pipes and indoor unit with nitrogen to check for positive leakage (pressures 150-200PSI), before conducting vacuuming leakage check?
20) Did you vacuum correctly to check the connecting pipes and indoor unit for leakage, what was the micron gauge reading, for how many minutes?
21) Did you check if the compressor can be started and stopped in a correct (design) manner?
22) If copper length were not made to the supplied or recommended refrigerant pipe length, how much refrigerant added or deducted?
23) Measured refrigerant pressures at outdoor service suction valve, when unit was st. Heat pump (PSI): Cooling (PSI): Outdoor Ambient Temp. (°F):
24) What were the measured temperatures (probe not touching any metal): At cooling: indoor return air °F, discharge air °F, and outdoor °F At heating: indoor return air °F, discharge air °F, and outdoor °F
25) Have you checked all unit functions, with customer's witness, and all functions are correct?
26) Did you show the user how to operate the unit? Did he/she understand you?
27) Do you provide regular one-year free technical service for this installation?
28) Do you list the working details in the invoice and leave a copy to the customer?

Installation Finished and Unit Works Successfully.
Print Name of Installation HVAC Technician:
Signature:

Date and time:

Installation Finished and Unit Works Successfully.
Print Name of Owner:
Signature:

Date and time:

By signing above, I acknowledge the liability and responsibility for any false statement or not telling all the facts, and I authorize YMGI to check the details of the filled above, and make its decision on warranty. I understand our filing or filling the warranty card/form DOESN'T mean automatic warranty approval, because warranty is approved only to those qualified and successful installations by qualified HVAC technician. I know the warranty, if approved, is a standard 5-year compressor and 1-year other parts only, without any labor coverage. I agree to and will follow all the contents contained in the Limited Product Warranty Policy that YMGI, not other entity, stated in public, including but not limited to manuals, web site, email, etc.

Important Note: A copy of the installing HVAC company's invoice to show all their work details, your payment proof, center copy B of this registration card filled after a successful installation, all three (3) MUST be mailed together to Warranty Dept., **YMGI Group, POB 1559, O'Fallon, MO 63366**, for warranty processing. Customer keeps bottom copy C. YMGI will check against copy A that was kept at YMGI.

CUSTOMER AND TECHNICIAN MUST READ

PRIOR TO OPENING THE BOX OF, OR INSTALLING / SERVICING THE PRODUCT (HVAC & R)

Upon the purchasing, unpacking, installation and/or service of this product, you and all other parties hired to install or service your products, have read all YMGI Group (we) has written hereafter and all agree:

1) You understand all that is written hereafter in this and other documents that we publish.
2) You will follow what is written hereafter in this and other documents that we publish.
3) You will be bound by and completely follow all policies, guidelines, instructions, warnings, attentions and other materials, as published by YMGI Group, its subsidiaries or sister companies, in writing.
4) Only a successful installation, fully (100%) conducted by a qualified HVAC technician(s), as detailed in the checklist of the **Limited Product Warranty Policy** and **Limited Product Warranty Registration Card/Form**, along with a properly detailed installation invoice, is eligible for the **Limited Product Warranty**.
5) Failure to follow what is written hereafter may cause various equipment issues that you will take full responsibility and liability for, including, but not limited to, losing manufacturer's warranty, unit not working properly, unit malfunctions, under-performance, decreased safety, increased potential of various damages to your property, body, home and/or business, etc.
6) YMGI documents and policies supersede those made or provided by the sales distributors or installing contractors. YMGI Group maintains the final authority in explaining and resolving any and all discrepancies that might exist between distributors/contractors' documents and ours.

YMGI STRONGLY RECOMMENDS:

* Customer hires a currently licensed/ certified HVAC technician(s) (N.A.T.E. or A.C.C.A certification is strongly recommended) to conduct 100% of the installation, inspection of all unit functions and repair service.
* Customer signs an installation/service contract with the installation/service technician's company who has good service references and you trust. Installation and service is very important to the life of your investment and provide you a lifetime of comfort and peace of mind.
* Customer requests the installer to put down a1-year labor warranty coverage in the installation contract.
* Have the technician check against all the items in the checklist of the **Limited Product Warranty Registration Card/Form**, sign and date it, to help ensure a proper and professional installation.
* Customer pays in full, only after all the unit functions are inspected, the unit works properly, warranty checklist is fully filled out and signed and you are fully satisfied.
* If any unit abnormality is found, have your technician check the unit first. Have them call for manufacturer technical assistance, if necessary, from your job site, not his office, so that we can more accurately assist him in diagnosing the cause of the malfunction.

CUSTOMER AND TECHNICIAN MUST READ

Dear Customer(s)/End User(s)/Unit Purchaser(s)/Installer(s)/Contractor(s)

Thanks for choosing YMGI products.

The YMGI equipment you purchased is either a split-type or a self-contained cooling/heating system which requires an installer's license, certification, knowledge, experience, carefulness and details for a successful and good installation. This equipment is different from those window or portable air conditioners you can normally purchase from local retail stores such as Home Depot, Lowe's, Sears, etc. which the manufacturer may not require licensed personnel to install.

Reading and following the YMGI Group recommendations, suggestions, and requirements, written in the following pages and other documents, is the first step in our hope and effort to help ensure a smooth installation & proper operation of your products for many years.

WHY DOES YMGI GROUP REQUIRE INSTALLATION AND SERVICE TO BE PERFORMED BY LICENSED OR CERTIFIED HVAC TECHNICIAN/ CONTRACTOR?

1) They have the training and experience to accurately and safely install and service your equipment.
The equipment runs with high-pressure refrigerant and oil and line-voltage. The copper lines must be installed properly to prevent leakage and foreign substances from contaminating the refrigerant system.

2) You will save money in the long run.
If any problems occur on the unit that is fully installed by the licensed or certified contractor, they have the training and experience to correct the problem more efficiently. A technician(s) may be unwilling to repair an issue on a unit that they did not install. If you do find a technician willing to perform the service, there is an increased possibility of higher service fees than normal, increased service visits, or delayed service from that technician.

3) It's the law!
The federal, state and/or local government and authorities have various governing laws or regulations, guidelines, ordinances, etc., requiring only licensed or certified professionals can install and service high pressure HVAC equipment.

SUGGESTIONS, TO AID YOU IN HIRING AN HVAC CONTRACTOR:

1) Hire a currently, practicing, licensed/ certified HVAC technician/ contractor. Technicians, who are no longer practicing (retired, etc.) in this field, may not have the updated knowledge or may lack experience on the equipment you have purchased.
2) Hire a technician/ contractor who services customers in your local area and you are familiar with. Local contractors have a faster response time and will be easier for you to determine if they are reputable.
3) Use only reputable licensed/ certified HVAC installation contractors/ technicians to prevent any unexpected charges as a result from unethical business practices.
4) Check their references, to verify they are a good service provider to the general customers. N.A.T.E or A.C.C.A certified technicians are strongly recommended.
5) Some contractors/ technicians may not feel comfortable about installing the equipment that you purchase for them to install, and they prefer to purchase and install the equipment. You can contact YMGI directly to check and see if there have been any contractors in your area who have installed our products or similar.
6) Ask for a detailed quote for the whole installation project. A flat rate quote is the safest contract for both you and the contractor
7) Your local HVAC technicians may charge you on a project basis or on an hourly basis. To our general knowledge and experience, **a full single head installation may normally cost anywhere from $800 to $1500**. These costs are estimates and your actual costs may differ due to job nature and location.
8) Number of hours can vary depending upon each individual situation, some factors are, but not limited to:
9) How difficult or complex the indoor unit is to be securely installed.
10) Hoe difficult or how long the inter-connecting pipes and wires are to be installed.
11) If all the suggestions have been taken and all the necessary steps are followed.

CUSTOMER AND TECHNICIAN MUST READ

MUST READ

12) If the contractor(s)/technician(s) are experienced with the systems/brands you purchase.
You might spend less. But remember, many times you get what you pay for.
13) Sign a contract with them. The contract should list all the detailed work they will conduct and the standards they will follow. Some contractors are willing to include a 1-year installation/service warranty at no extra charge. Check with them to see if that is available. If available, include that in the contract.
14) Verify and confirm the installation is done completely and all the unit functions have been checked and are working properly, all the items in the checklist have been checked and marked well in the warranty registration card/form, prior to paying the contractor in full.

The cost of not having your unit installed properly can be more expensive than spending the little extra money that hiring the right contractor will cost. Protect your investment and warranty eligibility by doing it right the first time.

THE FOLLOWING LISTS THE JOBS AND RESPONSIBILITIES OF THE TECHNICIAN/ CONTRACTOR:

* Performing a load calculation for the room(s) you would like to air condition. Cooling requirements will be different from the heating requirements. They will consider cooling hours, heating hours and your special needs or requirements. Supplemental heating such as baseboard heater or portable heater may help you save money by not over-sizing or under-sizing the heating equipment.
* Selecting the right type, size or model of cooling and/or heating equipment.
* Determining the best location to install the unit. (Positioning indoor unit, outdoor unit and running the inter-connecting pipes/wires.)
* Selecting the correct electrical components (HVAC circuit breaker or fuse and disconnect switch for the electric power to the outdoor unit, types and sizes of the connecting wires between circuit breaker/disconnect switch and outdoor unit, and the wires between outdoor unit and indoor unit).
* Keeping the indoor unit away from the ceiling and the outdoor unit away from the wall, bushes and other obstacles at a proper and safe distance to allow for the proper airflow through the unit's.
* Placing the units on a secured level structure.
* Taping and sealing both ends of the inter-connecting pipes, before running them through structures, to prevent dust or other debris from getting into the pipes otherwise they will contaminate and damage the refrigeration system. Failure to follow this practice will make your factory warranty void.
* Connecting the inter-connecting pipes between the outdoor and indoor units. Checking for leaks through pressurization with nitrogen. After releasing nitrogen, evacuate the piping and indoor unit, for removal of system contaminants. Finally refrigerant introduction and adjustment, if necessary, from the outdoor unit.
* Back-seating the stopping valves at outdoor condensing unit to release pre-charged refrigerant from outdoor unit to indoor unit.
* Measuring and recording the electrical voltages at different terminals and the refrigerant pressures at stopping valves of outdoor condensing unit.
* Verifying and ensuring the unit is connected to the proper electrical power supply.
* Adjusting refrigerant levels (if necessary) following the installation instructions or chart on the unit.
* Checking for any unusual noises and other abnormalities that might be present.
* Operating the unit and check all functions, one by one, and explain to the owner how to operate and maintain the unit.
* Completing all fields in detail on the installer checklist, signing and dating the **Warranty Registration Card/Form.**

LIMITED PRODUCT WARRANTY

If the installation is successfully and fully done by a qualified licensed/ certified HVAC technician/contractor, the registration card/form is filled completely and correctly, and filed along with a valid installation invoice from the contractor company within 7 days of the original installation, the following standard **Limited Product Warranty** is qualified:
5-year on compressor and 1-year other PARTS ONLY. There is **no labor coverage**.

CUSTOMER AND TECHNICIAN MUST READ

ATTENTION

1) The YMGI **Limited Product Warranty Policy**, details the eligibilities, coverage's and other explanations of the warranty terms between YMGI group and the unit owner.
2) The YMGI **Limited Product Warranty Policy** and the **Warranty Registration Card/Form** are either included inside the user's manual and/or installation instruction manual, or come separately in the unit packaging box/envelope. If for any reason they are not included with your shipment, contact our sales or customer service to request a copy (electronic or printed), prior to installation.
3) The checklist, in the **Warranty Registration Card/Form**, is for the currently licensed/ certified HVAC technician to fill out completely, while verifying all unit functions are operating correctly. This checklist is for the technician to test and check all details of your unit, to verify and ensure its proper operation.
4) The technician must complete all fields in the **Warranty Registration Card/Form**, especially the unit model and serial numbers and distributor information, and most importantly, the technician checklist.
5) Warranty Registration Card/Form shall be mailed, **along with the original copy of the currently licensed HVAC contractor's full installation invoice**, to YMGI Group, within 7-days after original installation, in order for YMGI to review and process your warranty registration.
6) Keep a copy of **Warranty Registration Card/Form** for your own use in the future, to aid in any possible future warranty claiming, any request of parts, customer service, and/or technical support.
7) YMGI reserves the right to approve or deny the warranty status based on the information reviewed.

Mailing address of the **Warranty Registration Card/Form:** Warranty Department, YMGI Group, POB 1559, O'Fallon, MO 63366, USA.

Following these requirements will aid in ensuring the units will be installed to the general HVAC practicing standards and are necessary factory requirements, to find problems early, prevent possible damage to the unit and help ensure the unit will work properly for its life time.

QUESTIONS ABOUT SELF-INSTALLATION VS HIRING LICENSED HVAC TECHNICIANS

Does YMGI allow to do-it-yourself installations (DIY) partially or fully? NO.
Unfortunately no brand or manufacturer can take the responsibility of the equipment if it is not professionally installed by a currently licensed HVAC technician/ contractor.
If unit is installed by non-licensed people, in part or fully, will the factory warranty be void? YES.
Some DIY installations have been successful, but these are exceptions. Most have resulted in equipment failure, due to lack of knowledge and experience. A few of the problems result from DIY's lack of knowledge in the following areas:

* Sizing and selecting correct type, size and model of cooling and/or heating equipment.
* Sizing and installing correct electric circuit breakers and wires.
* Wiring the units correctly and properly.
* Taping the ends, connecting to indoor and outdoor units correctly and properly.
* Vacuuming the inter-connecting refrigerant lines.
* Checking and/or fixing the refrigerant leaks.
* Checking and/or fixing the condensate drain leaks.
* Releasing the refrigerant from outdoor unit to indoor unit.
* Running the unit to check all the unit functions.
* Conducting the installation or trouble-shooting with correct tools, experience or professional knowledge to correct the problem.

RECEIVING AND FREIGHT DAMAGE

* Freight (package/unit) shall be checked thoroughly for damage at receiving before accepting by signing on the carrier's delivery paperwork.
* Upon shipment being signed for acceptance, it becomes a binding document as to the condition of the products on delivery. We cannot process any shipping damage claim, if you accept the delivery.
* If damage is found at delivery, both you and the delivery driver must make notes on the delivery receipt or other freight paperwork detailing the damage found by marking position/parts on unit, description of damage, time/ date, your name, contact phone, etc. on the delivery documents. Make a copy of the marked delivery receipt.

MUST READ

CUSTOMER AND TECHNICIAN MUST READ

* If the damage is minor or partial, that you choose to accept, you can contact the distributor or YMGI to discuss the possible replacement of the damaged part.
* If refusal of the shipment is needed due to severe freight damage, **DO NOT** sign the carrier's delivery receipt document indicating that you accept the products. Mark receipt "REFUSED DUE TO FREIGHT DAMAGE." Sign and date along with the delivery driver's signature and date.
* Take pictures showing the damage, before the delivery driver leaves.
* If you accept the delivery or fail to note damage on the driver's delivery receipt, the ability to claim freight damage is lost and YMGI will not replace the unit on this basis.
* Contact the distributor or YMGI, report the damage by forwarding the marked delivery receipt copy and pictures.
* Only after YMGI verifies with the carrier the necessary detailed notes of received freight damage, will the damaged products be eligible for replacement.
* If the returned products are found not damaged, YMGI will treat it as a return and will charge you 25% of product value plus added shipping cost.

RETURN-YMGI GROUP POLICIES & RETURN GOODS AUTHORIZATION (RGA)

All sales are final. If the customer wishes to return a product, the following **Return Policies** apply.

A. Only those products (units, parts or accessories) under the following conditions, are eligible for return:
1) Products are returned within 30 days of their original shipment date from YMGI
2) Products have not been installed.
3) No damage exists on the products being returned.
4) No missing products.
5) Products and packages are clean.
6) No duct tape or marking on the product or box.
7) Products are still their original package, in good shape and in re-sellable condition, as YMGI determines.

B. Preapproval steps for your return request:
1) Contact your distributor or YMGI to request a return.
2) Photograph your product and box to show details
3) YMGI will review your request, along with the pictures and any other details pertaining to your request.
4) If YMGI agrees to process your return request, a form called **Return Goods Authorization (RGA), along with an assigned RGA #** will be forwarded to your distributor or you.
5) Any return without YMGI Group approved RGA #, will not be accepted.

C. YMGI must verify the following before you can pack your products:
1) No products (units, parts, accessories) are missing.
2) No damage is found.
3) The products are in the original packaging.
4) No duct tape on any product or box.
5) Pictures have been taken and sent to YMGI to verify the product and boxes are not damaged.
6) The RGA has been completed and a copy has been returned to YMGI, via email or fax.
7) YMGI has approved the request in writing.

D. Shipping Preparation:
1) Package all products in a manner in which no damage can occur to the product and secure to a pallet.
2) Take and forward pictures of packed pallets for YMGI to verify proper packaging and no existing damage.
3) Include the YMGI approved RGA# in the shipping documents.
4) YMGI reserves the right to approve or deny any shipments.
5) YMGI can arrange shipping for you, but not at YMGI's cost. If this option is chosen, a packing list and BOL will be issued to you through YMGI.
6) If the above option is not chosen, you will be responsible for all freight charges. YMGI will not accept any returned items COD.
7) Place the package in an area which is accessible to the shipping company for pickup and limits the possibility of damage to the product. Customer must be present at the time of freight pick up.

After shipping, fax the BOL to YMGI Group at 1-866-377-3355 or email to customerservice@ymgigroup.com, detailing the information of the freight company and their tracking number.

E.Freight Damage:
1) YMGI Group will inspect returned items
2) Claiming of freight damage from a customer hired carrier will be the customer's responsibility.
3) Claiming of freight damage from a YMGI hired carrier will be YMGI's responsibility.

CUSTOMER AND TECHNICIAN MUST READ

F. Charges for your return:
1)A restocking charge of 25% creditable invoice value.
2)All return shipping fees.
3)Additional fees will be charged, if products are found to be damaged, missing or used.
4)YMGI will notify the distributor of the charges only after the inspection and assessment of the returned products has been completed.

Attention:
1) Returned products must be shipped within 7 days of YMGI's releasing of **RGA #**.
2) **All RGA** shipping shall be prepaid by the customer. **YMGI will not accept any COD freight**.

YMGI GROUP DISCLAIMING-1:
YMGI Group will NOT accept any return, or may not honor 100% credit for any return of Product(s)/Part(s)/Accessories, in any of the following cases:
* Return requests made 30 or more days after the date of original sales shipping from YMGI Group warehouse.
* Return shipment is initiated 8 days or more after the RGA is approved.
* Returned products received not displaying an YMGI-approved valid **RGA #**.
* Returned products received C.O.D.
* Returned products not received in the original packaging.
* Returned products received with non-repairable packaging, including duct tape or marks on units or carton boxes.
* Returned products received with missing units/parts/accessories.
* Returned products received, are found to be non-functional or damaged.

YMGI GROUP DISCLAIMING-2:
* YMGI Group will not be responsible for any losses of returned unit(s)/part(s)/accessories in transition to YMGI Group warehouse.
* YMGI Group RGA is valid for seven (7) days from the original issuing date. Returns will not be accepted, if shipping is made 8 or more days after the YMGI Group RGA is issued.

DEFECTIVE UNITS / PARTS / ACCESSORIES-REPAIR OR REPLACEMENT

Out of thousands of units sold every year, there may be an occasional instance your product does not operate properly. Reasons of but are not limited to: **manufacturing, installation, operation, maintenance and knowledge of operator**.

Equipment failure does not automatically denote a product defect from the factory assembly line. The defects can be caused, during production, transportation, installation, operation, maintenance, or service. Defects may NOT be the responsibility of the manufacturer. Nobody willfully or intentionally produces a defective product. No determination shall be made until the technical issue(s) or the causes of the defect(s) are identified.

The defects might be found before/ during installation or in the operation of the unit. Defects can be in the form of blown fuse(s), defective control board(s), damaged remote control, loose or missing screws, etc. These defective parts can be replaced easily.

Some functions of our units are different from what are typical in traditional split type air conditioning and heat pump systems and similar systems made by other manufacturers. These are not defects. Take some time to learn the functions of your unit. We will be happy to assist you with any questions you may have concerning the functions of your new unit.

If a defect is found, whether at the original installation, or during normal operation, we will gladly help you in the following steps in sequence from 1 to 3:

1. **Part repair or replacement after trouble-shooting:** This is the most common and generally the easiest and most economical way for all parties, since the problem and all part needs can be accurately and completely identified.

* Your technician calls our technical support line, from your job site, after checking your units and getting all the information ready.
* Our technical support will go through several steps, over the phone or through email, with your technician, in order to help identify and resolve the problems. Normally wiring correction, piping correction, part repair/ replacement will resolve the problems.

MUST READ

CUSTOMER AND TECHNICIAN MUST READ

* Your technician will then need to verify and confirm the problem(s) before YMGI can ship out the replacement part(s). Inaccurate or incomplete troubleshooting or part replacement will delay the repair. YMGI technical support will only speak with a licensed/certified technician in regards to the repair of your unit. In our experience this saves time and money for all parties involved.

Your technician is the only person to perform any physical checking, trouble-shooting and replacing of any defective part(s) for your units. Our factory technical support is just a help. **YMGI provided no labor warranty on the products.**

2. **Unit/part repair at our workshop(s):** Due to the limitations of our technical support not being at your job site, or your technician's experience with our product, the problem may not be resolved as quickly as would be desired. If the problem is still not resolved after attempts between your technician and our technical support, you can elect to have the unit repaired at our facility. If this step is chosen:
   1) YMGI will send to you the ***Customer Request to Ship Products to YMGI Service Center for Inspection and Repair, and Authorization to Charge*** form.
   2) You will review the form and fill all fields appropriately, sign and send back to the YMGI Group.
   3) Once the form has been completed and sent back to YMGI, remove the units and ship back to YMGI.

Please make a note describing the problem and communication history, if possible. Our technicians will check the units and find the problem(s), repair the issue(s), and ship the unit back to you following the conditions set forth in the signed repair agreement. All unit removal and re-installation is done at your cost and must be done by a currently valid licensed HVAC technician.

3. **Unit replacement:** Only applies to those defects reported within 30 days of original purchase date and if all necessary warranty paperwork had been received and approved. This option applies only if the above steps cannot resolve the problem(s). Either indoor or outdoor unit replacement is available, based on the actual need, at YMGI's determination. ***This option shall be the last resort***, due to refrigerant and wiring considerations. All unit removal, re-installation and shipping cost are the responsibility of the customer. YMGI maintains the final authority as to unit replacement. Replacement will be made with the same model only. Alternate units will be treated as a new order.

Returning Replaced Defective Units/Parts/Accessories After Unit Repair: (Only applies to steps 1&3 above)
1) Repack the replaced unit/ part /accessory in the box which contained the replacement part.
2) Parts can be boxed for UPS, FedEx or equivalent ground service. Units shall be secured onto the skid on which the replacement was shipped after placing into the package from the replacement product.
3) Ship **all** replaced products, to YMGI-designated location. You will be charged if YMGI does not receive the replaced parts.

Standard factory warranty does not cover the cost of materials and labor that are incurred at your site.
There will be no cost for the replacement unit, if YMGI determines the defect is manufacturer related.
Replacement will be made with the same model, only. Alternate units will be treated as a new order.

CUSTOMER SERVICE / TECHNICAL SUPPORT FROM YMGI GROUP

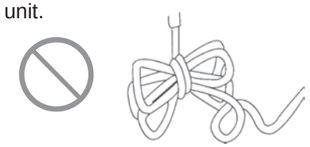
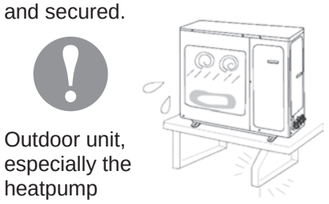
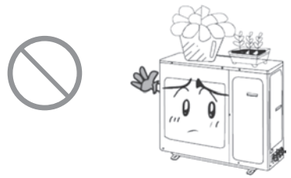
For questions or help with your unit, contact the original installer or service provider.
YMGI Group does not install nor physically service your unit. Your installer or service provider must check the unit prior to contacting YMGI Group from your jobsite, in order to be helped in an efficient and timely manner.
* Factory customer service at customerservice@ymgigroup.com Tel: 1-866-833-3138x704
* Factory technical support at techsp@ymgigroup.com Tel: 866-833-3138x703
* Fax: 1-866-377-3355

An **"YMGI Group Customer Service/Technical Support Daily Log Sheet"** will be filed in writing at our office, for effective communication between you and YMGI Group customer service, your technician and YMGI Group technical support. Before contacting the YMGI Group locate the IP# written at the top of your warranty registration form. Use this IP# whenever you contact the YMGI Group.

DISTRIBUTOR AND MANUFACTURER POLICIES

* All questions concerning sales or money will be directed to the sales distributor from which you purchased the units.
* Read and follow all policies set forth from the distributor from which you purchased your unit.
* Upon purchase and installation of the unit(s), you agree to be bounded by all policies published by both distributors and YMGI.
* MGI Group has the final authority and supersedes other related parties (distributors, etc.) concerning all policies regarding YMGI products.

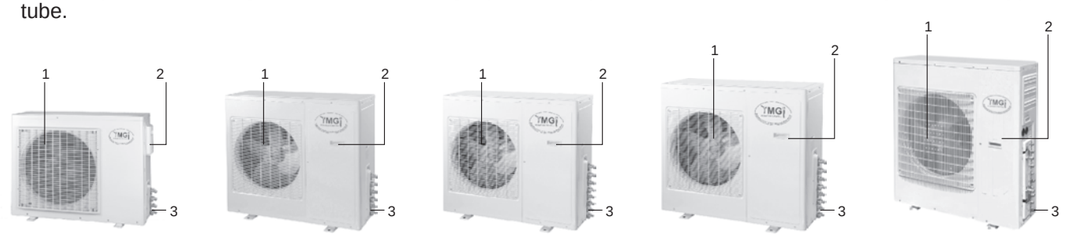
WARNINGS FOR INSTALLATION, OPERATION, MAINTAINING AND SERVICE

When smelling a burning or smoke, turn off unit and disconnect the power and contact your installation or service technician without delay. If the abnormal or danger is not found and removed, keeping on operating the unit will damage the unit or even cause electric shock or fire.	Must connect the unit to dedicated HVAC circuit breaker of proper size. Shall not turn on and then off the unit back and forth frequently.	Must not cut off or damage power cables and control wires. In case of any damage found on wires, must replace with good one without any delay.
Don't entangle electrical wires or leave extra length of wire in the unit.  Never use indoor wires for outdoor use.	Not to connect unit to the wall switch. Disconnect the power supply, if not using the unit for quite a while.	Never drag wires too hard, or use wire to hang or band or fasten anything.
Before cleaning, it is necessary to stop unit operation and off the power supply. Must turn off unit and disconnect electrical power, before cleaning or servicing the unit. Suggest to put a warning sign at the switch, to avoid accidental turning on the power by somebody who doesn't know service is in process.	Only apply correct electrical power to the unit (208-230/1/60). The compressor will vibrate if the voltage is too low or too high. Electrical components may fail, if voltage is too high.	Don't attempt to install or repair the unit by yourself. Saving on these work is not worthy, since you miss chance to have the professional look into the unit for a full diagnosis and complete repair. Also, factory warranty will be lost. Handy man may successfully conduct some work. But, it is about responsibility and liability. Customer will have to take responsibility and liability for the DIY installation or or repair.
Mounting bracket must be sturdy and secured.  Outdoor unit, especially the heatpump outdoor unit, must be installed at least 3-5 inches above the ground, to keep from possible ice being built up in cold weather.	Don't step onto the top of unit. Don't place anything atop of it. 	The unit must be securely grounded. The cable shall be connected to the grounding device in the home or building.

NAMES OF THE PARTS

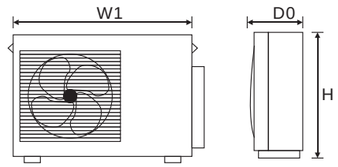
⚠ WARNING

* Be sure to cut off the power supply before cleaning the air conditioner; otherwise electric shock might happen.
* Wetting of air conditioner may cause the risk of electric shock. Make sure not to wash your air conditioner in any case.
* Volatile liquids such as thinner or gasoline will cause damage to the appearance of air conditioner. (Only use soft dry cloth moist cloth clean the air conditioner cabinet).
* This product must not be disposed together with the domestic waste.
  This product has to be disposed at an authorized place for recycling of electrical and electronic appliances.
* The temperature of refrigerant circuit will be high, please keep the interconnection cable away from the copper tube.



NO.	WMMS-21CH WMMS-30CH	WMMS-24CH WMMS-36CH	WMMS-42CH	WMMS-48CH	WMMS-60CH
1	Air Discharge grille	Air Discharge grille	Air Discharge grille	Air Discharge grille	Air Discharge grille
2	Wiring Panel/Handle	Front side panel/handle	Front side panel/handle	Front side panel/handle	Front side panel/handle
3	Valves	Valves	Valves	Valves	Valves

TECHNICAL DATA

MOD		WMMS-21CH WMMS-30CH	WMMS-24CH WMMS-36CH	WMMS-42CH	WMMS-48CH	WMMS-60CH	UNIT
Electricity data							
Electricity supply		208-230/1/60					
HVAC type fuse or circuit breaker		30	30	30/40	40	50	AMP
Minimum power cord size		10	10	8	8	8	AWG
Refrigerant charge (R410A)		56	88	88	88	169	OZ
Size							
	W1	33.3	35.25	35.25	37.4	40.25	Inch
	H	23.5	27.6	27.6	27.5	43.5	Inch
	D0	15.0	15.75	15.75	15.75	17.5	Inch

OUTDOOR UNIT WORKING TEMPERATURE RANGE

	Outdoor side DB(°F)
Maximum cooling	115(T1)
Minimum cooling	20
Maximum heating	75
Minimum heating	5

SPECIFICATION

Outdoor Unit Models		WMMS-21CH-V2B(59)(2) (1 to 2) WMMS-30CH-V2B(59)(2) (1 to 2)	WMMS-24CH-V2B(59)(2) (1 to 3) WMMS-36CH-V2B(59)(2) (1 to 3)	WMMS-42CH-V2B(59)(2) (1 to 4)	WMMS-48CH-V2B(59)(2) (1 to 4)	WMMS-60CH-V2B(59)(2) (1 to 5)
Power Supply		208-230/1/60				
Cooling Capacity* (Btu/h)	Max. Allowed IDU Cap. Total	30,000	36,000	48,000	57,000	72,000
	Rated	18,000	24,000	28,000	30,000	42,000
	Min.	7,200	10,000	10,000	10,000	12,000
Total Power Input in Cooling Mode* (W)	Max.	2300	3300	4500	4500	5100
	Rated	1550	2250	2600	2600	3950
	Min.	650	800	900	1000	1200
SEER		16.0	16.0	16.0	16.0	16.0
HSPF		8.2	8.2	8.2	8.2	8.2
Heating Capacity* (Btu/h)	Max. Allowed IDU Cap. Total	32,000	38,000	50,000	59,000	74,000
	Rated	19,000	29,500	31,000	33,000	46,000
	Min.	6,500	9,000	9,000	9,000	10,000
Total Power Input in Heating Mode*	Max.	2400	3000	3500	3500	4800
	Rated	1750	2500	2920	2920	4400
	Min.	650	800	900	1000	1200
Liquid Valve Size		2 x 1/4"	3 x 1/4"	4 x 1/4"	4 x 1/4"	4 x 1/4" + 3/8"
Gas Valve Size		2 x 3/8"	3 x 3/8"	4 x 3/8"	4 x 3/8"	2 x 3/8" + 2 x 1/2" + 5/8"
Compressor Manufacturer/trademark		Sanyo / Mitsubishi / Others	Sanyo / Mitsubishi / Others	Sanyo / Mitsubishi / Others	Sanyo / Mitsubishi / Others	Sanyo / Mitsubishi / Others
Compressor Oil		/ FV50S /	/ FV50S /	/ FV50S /	/ FV50S /	/ FV50S /
L.R.A. (A)		27	45	45	45	55
Compressor RLA (A)		8.4	9.7	9.7	10	13
Compressor Power Input (W)		1245	2200	2200	2200	3000
MCA (A)		15	20	20/30	30	50
Fuse or Circuit Breaker (HVAC Type)		30	30	30/40	40	50
Throttling Method		Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve	Electronic Expansion Valve
Starting Method		Transducer starting	Transducer starting	Transducer starting	Transducer starting	Transducer starting
Recommended Working Ambient Temp Ranges (F)		AC: 20 to 115 HP: 5 to 75	AC: 20 to 115 HP: 5 to 75	AC: 20 to 115 HP: 5 to 75	AC: 20 to 115 HP: 5 to 75	AC: 20 to 115 HP: 5 to 75
Condenser		Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube
Output of Fan Motor (W)		60	60	60	60	140
Fan Motor RLA (A)		0.65	0.65	0.65	0.65	1.1
Fan Motor Capacitor (uF)		3	3.5	3.5	3.5	6
Air Flow Rate of Outdoor Unit		/	/	/	/	/
Fan Type-Piece		Axial fan 1	Axial fan 1	Axial fan 1	Axial fan 1	Axial fan 1
Fan Diameter (Inches)		18.1	18.1	18.1	18.1	22.5
Defrosting Method		Auto Defrost	Auto Defrost	Auto Defrost	Auto Defrost	Auto Defrost
Climate Type		T1	T1	T1	T1	T1
Isolation		I	I	I	I	I
Moisture Protection		IP24	IP24	IP24	IP24	IP24
Max. Operating Pressure at High Side (PSI)		550	550	550	550	550
Max. Operating Pressure at Low Side (PSI)		175	175	175	175	175
Sound Pressure Level dB (A) (H/L)		56/54	56/54	56/54	56/54	56/54
Sound Power Level dB (A) (H/L)		66/64	66/64	66/64	66/64	66/64
Dimensions of Outdoor Unit (W x H x D) (Inches)		33.3 x 27.0 x 11.8	37.4 X 27.5 X 15.5	37.2 X 27.6 X 15.75	37.4 X 27.5 X 15.5	42.25 X 43.5 X 17.5
Dimensions of Package (W x H x D) (Inches)		39.1 x 29.5 x 16.9	40.6 X 29.5 X 16.5	40.5 X 29.5 X 18.0	40.6 X 29.5 X 16.5	46.0 X 48.6 X 19.4
Net Weight /Gross Weight (LBs)		115 / 126	150 / 161	165 / 176	165 / 176	225 / 248
Refrigerant /Factory Pre-Charge for 25' (LBs)		R410A / 2.97	R410A / 4.84	R410A / 4.84	R410A / 4.84	R410A / 10.6
Loading Quantity	20' Container	87	80	80	80	50
	40' Container	183	170	170	170	100
	40' High Cube Container	183	170	170	170	100

OUTDOOR UNIT WORKING TEMPERATURE RANGE

RECOMMENDED MATCHING INDOOR AND OUTDOOR UNITS (NOT ALL POSSIBILITIES BEING LISTED)

Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-21CH-V2B(59)(2) / WMMS-30CH-V2B(59)(2)					
1 Indoor Unit		2 Indoor Units		3 Indoor Units	4 Indoor Units
09K	12K	09K+09K	09K+12K	Not allowed	Not allowed
18K	24K	12K+12K	12K+18K		

Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-24CH-V2B(59)(2) / WMMS-36CH-V2B(59)(2)						
1 Indoor Unit	2 Indoor Units		3 Indoor Units			4 Indoor Units
Not allowed	09K+12K	12K+12K	09K+09K+09K	09K+09K+12K	09K+09K+18K	Not allowed
	09K+18K	18K+18K	09K+12K+12K	09K+12K+18K	12K+12K+12K	

Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-42CH-V2B(59)(2)								
1 Indoor Unit	2 Indoor Units		3 Indoor Units			4 Indoor Units		
Not allowed	12K+12K	09K+18K	9K+9K+9K	09K+09K+12K	09K+12K+12K	09K+09K+09K+09K	09K+09K+09K+12K	09K+09K+12K+12K
	12K+18K	12K+24K	9K+9K+18K	09K+12K+18K	12K+12K+18K	09K+12K+12K+12K	12K+12K+12K+12K	09K+09K+09K+18K
	18K+18K	18K+24K	12K+12K+12K	09K+09K+24K	09K+12K+24K	09K+09K+12K+18K		

Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-48CH-V2B(59)(2)								
1 Indoor Unit	2 Indoor Units		3 Indoor Units			4 Indoor Units		
Not allowed	12K+18K	09K+24K	09K+09K+09K	09K+09K+12K	09K+12K+12K	09K+09K+09K+09K	09K+09K+09K+12K	09K+09K+09K+18K
	18K+18K	12K+24K	09K+09K+18K	12K+12K+12K	09K+12K+18K	09K+09K+12K+18K	09K+12K+12K+18K	12K+12K+12K+12K
	18K+24K	24K+24K	12K+12K+18K	09K+12K+24K	12K+12K+24K	09K+09K+09K+24K	09K+09K+12K+24K	09K+12K+12K+24K

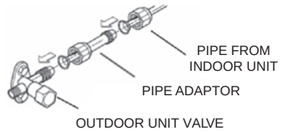
Indoor Unit Mix and Match Size Possibilities (Samples), to Work with: Outdoor Unit WMMS-60CH-V2B(59)(2)										
1 Indoor Unit	2 Indoor Units		3 Indoor Units			4 Indoor Units			5 Indoor Units	
Not allowed	12K+12K	12K+18K	09K+09K+09K	09K+09K+12K	09K+12K+12K	09K+09K+09K+12K	09K+09K+09K+09K	09K+09K+09K+18K	09K+09K+09K+12K+12K/18K/24K	09K+09K+09K+12K+12K/18K/24K
	18K+18K	12K+24K	09K+09K+18K	12K+12K+18K	09K+12K+18K	09K+09K+12K+18K	09K+12K+12K+12K	12K+12K+12K+12K	09K+09K+12K+12K+12K/18K/24K	09K+12K+12K+12K+12K/18K
	18K+24K	24K+24K	12K+12K+12K	12K+12K+24K	09K+12K+24K	09K+09K+12K+24K	09K+12K+12K+24K	12K+12K+12K+24K	12K+12K+12K+12K/18K	09K+09K+12K+12K+18K
									09K+09K+12K+18K+18K	09K+12K+12K+18K+18K
									12K+12K+12K+18K+18K	

Important Notes:

* When the rated total capacity of all the indoor units exceeds the rated capacity of outdoor unit, each indoor unit may not output the rated capacity and one may differ from other, upon other installation/operation factors, it all units are turned on to run compressor simultaneously.
* Must follow pipe length and refrigerant charge adjustment as instructed in below table:

PIPE ADAPTOR

Whenever the outdoor unit gas valve of size 3/8" is to connect with indoor unit gas pipe of 1/2" or 5/8", one 3/8" - 1/2" or 3/8" - 5/8" adaptor is to be used in between. This reducer is packed separately and shall be installed at job site.



SAMPLE SIZE COMBINATIONS AND PERFORMANCE DATA

WMMS-2AM21-V2B(59)(2) / WMMS-2AM30-V2B(59)(2) Cooling Performance Nominal Data

Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)
9K	9K	10880				10880 (9180~12240)	1050 (1000~1300)
12K	12K	11900				11900 (9180~14960)	1050 (1000~1500)
18K	18K	17000				17000 (11220~22780)	1400 (1000~2600)
9+9K	18K	8500	8500			17000 (11220~22780)	1400 (1000~2600)
9+12K	21K	8500	11900			20400 (11220~26520)	1800 (1000~3300)
12+12K	24K	11900	11900			23800 (11220~27880)	2300 (1000~3800)
9+18K	27K	8840	15300			24140 (11220~32300)	2200 (1000~4600)
12+18K	30K	11900	12240			24140 (11220~32300)	2200 (1000~4600)

WMMS-2AM21-V2B(59)(2) / WMMS-2AM30-V2B(59)(2) Heating Performance Nominal Data

Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)
9K	9K		9860			9860 (6630~15980)	1100 (850~2450)
12K	12K			13260		13260 (6800~17000)	1450 (850~2500)
18K	18K	19720				19720 (8670~27880)	1850 (900~2950)
9+9K	18K	10880	10880			21760 (8670~29240)	2050 (900~2950)
9+12K	21K	10880	13600			24480 (8670~30600)	2300 (900~3300)
12+12K	24K	13260	13260			26520 (10200~32640)	2400 (900~3500)
9+18K	27K	12240	17000			26860 (10200~31620)	2400 (900~3500)
12+18K	30K	12240	15300			27540 (10540~33660)	

WMMS-3AM24-V2B(59)(2) / WMMS-3AM36-V2B(59)(2) Cooling Performance Nominal Data

Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)
9+9K	18K	8500	8500			17000 (11220~22780)	1400 (1000~2600)
9+12K	21K	8500	11900			20400 (11220~26520)	1800 (1000~3300)
12+12K	24K	11900	11900			23800 (11220~27880)	2300 (1000~3800)
9+18K	27K	8840	15300			24140 (11220~32300)	2200 (1000~4600)
12+18K	30K	11900	12240			24140 (11220~32300)	2200 (1000~4600)
9+9+9K	27K	8075	8075	8075		24140 (11220~32300)	2200 (1000~4600)
9+9+12K	30K	7140	7140	9860		24140 (11220~32300)	2200 (1000~4600)
9+12+12K	33K	6460	8840	8840		24140 (11220~32640)	2200 (1000~4650)
12+12+12K	36K	8075	8075	8075		24140 (11220~32640)	2200 (1000~4650)
9+9+18K	36K	7480	7480	9180		24140 (11220~32640)	2200 (1000~4650)
9+12+18K	39K	7140	7820	9180		24140 (11220~32640)	2200 (1000~4650)
12+12+18K	42K	7820	7820	8500		24140 (11220~32640)	2200 (1000~4650)

WMMS-3AM24-V2B(59)(2) / WMMS-3AM36-V2B(59)(2) Heating Performance Nominal Data

Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)
9+9K	18K	10880	10880			21760 (8670~29240)	2050 (900~2950)
9+12K	21K	10880	13600			24480 (8670~30600)	2300 (900~3300)
12+12K	24K	13260	13260			26520 (10200~32640)	2400 (900~3500)
9+18K	27K	12240	17000			26860 (10200~31620)	2400 (900~3500)
12+18K	30K	12240	15300			27540 (10540~33660)	2600 (900~3800)
9+9+9K	27K	9632	9632	9632		28900 (10540~37400)	2600 (900~3800)
9+9+12K	30K	9010	9010	10880		28900 (10540~37400)	2600 (900~3800)
9+12+12K	33K	7820	10880	10880		29580 (10540~37400)	2600 (900~3800)
9+9+18K	36K	7990	7990	13600		29580 (10540~37400)	2400 (1000~3900)
12+12+12K	36K	9860	9860	9860		29580 (10540~37400)	2350 (1000~4000)
9+12+18K	39K	7480	9180	12920		29580 (10540~37400)	2350 (1000~4000)
12+12+18K	42K	8500	8500	12580		29580 (10540~37400)	2400 (1000~4000)

WMMS-4AM42-V2B(59)(2) Cooling Performance Nominal Data

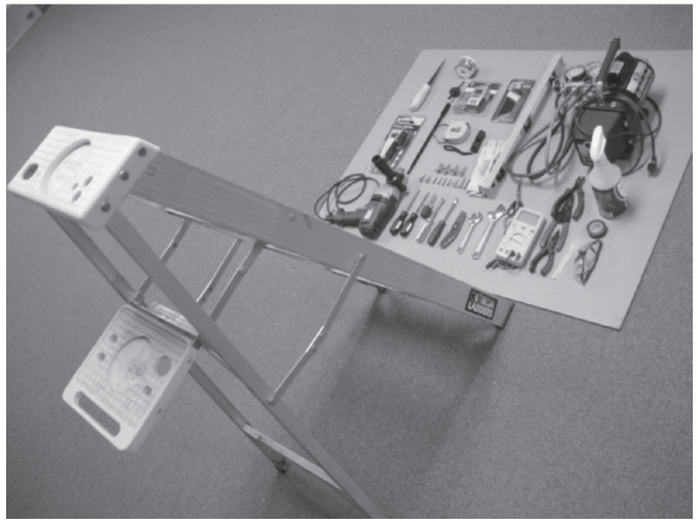
Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)
9+9K	18K	8500	8500			10880 (9180~12240)	1400 (1000~2600)
9+12K	21K	8500	11900			11900 (9180~14960)	1800 (1000~3300)
12+12K	24K	11900	11900			17000 (11220~22780)	2300 (1000~3800)
9+18K	27K	8840	15300			17000 (11220~22780)	2200 (1000~4600)
12+18K	30K	11900	12240			20400 (11220~26520)	2200 (1000~4600)
9+9+9K	27K	8044	8044	8044		23800 (11220~27880)	2200 (1000~4600)
9+9+12K	30K	7140	7140	9860		24140 (11220~32300)	2200 (1000~4600)
9+12+12K	33K	6460	8840	8840		24140 (11220~32300)	2200 (1000~4650)
12+12+12K	36K	8044	8044	8044		24140 (11220~32300)	2200 (1000~4650)
9+9+18K	36K	7480	7480	9180		24140 (11220~32300)	2200 (1000~4650)
9+12+18K	39K	7140	7820	9180		24140 (11220~32640)	2200 (1000~4650)
12+12+18K	42K	7820	7820	8500		24140 (11220~32640)	2200 (1000~4650)
9+9+9+9K	36K	6800	6800	6800	6800	24140 (11220~32640)	2480 (1000~4650)
9+9+9+12K	39K	1750	1750	1750	2750	24140 (11220~32640)	2480 (1000~4650)
9+9+12+12K	42K	1500	1500	2500	2500	24140 (11220~32640)	2480 (1000~4700)
9+12+12+12K	45K	1700	2100	2100	2100	27200 (11220~32640)	2480 (1000~4700)

WMMS-4AM42-V2B(59)(2) Heating Performance Nominal Data

Indoor Unit Combinations	Total Capacity	Room A	Room B	Room C	Room D	Capacity Rating-Btu/h (Min.~Max.)	Input Power Rating-Watts (Min.~Max.)
9+9K	18K	10880	10880			21760 (8670~27880)	2050 (900~2950)
9+12K	21K	10880	13600			24480 (8670~28900)	2300 (900~3300)
12+12K	24K	13260	13260			26520 (10200~31620)	2400 (900~3500)
9+18K	27K	9860	17000			26860 (10200~31620)	2400 (900~3500)
12+18K	30K	12240	15300			27540 (10540~33660)	2400 (1000~3900)
9+9+9K	27K	9180	9180	9180		27540 (10540~33660)	2400 (1000~4000)
9+9+12K	30K	8500	8500	10540		27540 (10540~33660)	2400 (1000~4000)
9+12+12K	33K	7480	10370	10370		28220 (10540~33660)	2450 (1000~4000)
9+9+18K	36K	7990	7990	11560		27540 (10540~33660)	2400 (1000~4000)
12+12+12K	36K	9690	9690	9690		29070 (10540~33660)	2500 (1000~4000)
9+12+18K	39K	7480	9180	10880		27540 (10540~33660)	2400 (1000~4000)
12+12+18K	42K	8500	8500	10540		27540 (10540~33660)	2400 (1000~4000)
9+9+9+9K	36K	8160	8160	8160	8160	32640 (11220~37400)	2600 (1100~4200)
9+9+9+12K	39K	7480	7480	7480	10200	32640 (11220~37400)	2600 (1100~4200)
9+9+12+12K	42K	7140	7140	9180	9180	32640 (11220~37400)	2600 (1100~4200)
9+12+12+12K	45K	6120	8840	8840	8840	32640 (11220~37400)	2600 (1100~4200)

1) The DC inverter outdoor unit may work with many different combinations of styles (wall, ceiling, ceiling/floor, concealed, etc.) and sizes of indoor units.
2) In real world, there might be small percentage of applications where all indoor units will be working at peak demand of cooling or heating needs. One room could be at peak demand, others may not. This way, the outdoor unit doesn't need to work at peak speed/load all the time.
3) Not all pairs of refrigerant valves need to be connected at initial installation. But, there is minimum amount of indoor units shall be connected (refer to the spec. sheet for details).
   If only few of indoor units are installed initially, other indoor units can still be installed in the future whenever ready (need to vacuum and adjust refrigerant charge accordingly).
4) These outdoor unit can only drive all indoor units for one thermal mode at one time. Shall not run cooling in one indoor unit, and heating in another one. In case of mode conflict or clash, correct the thermal mode which is different from others, or shut off power and select one thermal mode for all indoor units.

RECOMMENDED TOOLS FOR INSTALLATION



1) Mounting Indoor & Outdoor Units and Running Piping/Wiring

Ruler (Not Shown)
Stud-Finder
Dry-Wall Saw
Electric Drill
3" Hole Saw
Drill Extension
Hammer Drill and Bit (Not Shown)
Measuring Tape
Level
Flash Light
Screw Driver (Phillps and Flat)
Hammer
Knife
Scissors
Goggled Glass
Mask
Gloves
Ladder

2) Refrigeration Related Work

Individual Wrentch Set (Use Two at One Time)
Flare-Nut Tool Set (Not Shown)
Hex Head Allen Wrentch Sets (Metric and Imperial)
Brazing Rods and Brazing Torch Outfit for AC Application (Not Shown)
Brazing Flux
Nitrogen Cylinder for Positive Pressure Leakage Check (Not Shown)
Soap Bubble for Positive Pressure Leakage Check (Not Shown)
Vacuum Pump for Negative Pressure Leakage Check
Helium Refrigerant Minor Leakage Check (Not Shown)
Manifold

3) Electrical Related Installation

Wire Cutter
Wire Stripper
Sharp Plier
Cable Ties
Black Tape for Electrical Use
lectrical Meter

4) Trial Running Units and Inspection

Clamp Meter (Not Shown)
Manifold
Infra Thermometer (Not Shown)

HANDLING

⚠ After having removed the packaging, check that the contents are intact and complete.

⚠ The outdoor unit must always be kept upright.

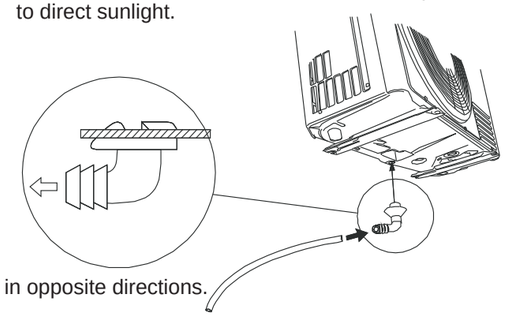
⚠ Handling must be done by suitably equipped qualified technical personnel using equipment that is suitable for the weight of the appliance.

INSTALLING OUTDOOR UNIT

LOCATION

⚠ Use bolts to secure the unit to a flat, solid floor. When mounting the unit on a wall or the roof, make sure the support is firmly secured so that it cannot move in the event of intense vibrations or a strong wind.

* Do not install the outdoor unit in pits or air vents.
* Do not install the outdoor unit where it is exposed to direct sunlight.



INSTALLING THE PIPES

⚠ Use suitable connecting pipes and equipment for the refrigerant R410A.

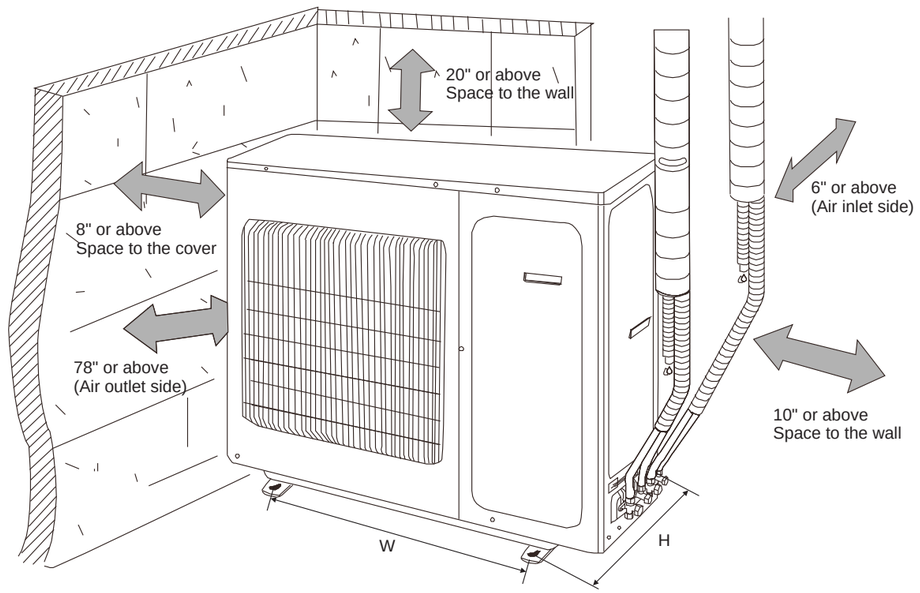
⚠ The refrigerant pipes must not exceed the maximum lengths given in the technical data table.

⚠ Lag all the refrigerant pipes and joints.

⚠ Tighten the connections using two wrenches working in opposite directions.

Install the drain fitting and the drain hose (for model with heat pump only)
Condensation is produced and flows from the outdoor unit when the appliance is operating in the heating mode. In order not to disturb neighbors and to respect the environment, install a drain fitting and a drain hose to channel the condensate water. Install the drain fitting and rubber washer on the outdoor unit chassis and connect a drain hose to it as shown in the figure.

INSTALLATION CLEARANCE



INSTALLATION CLEARANCE

Model		WMMS-21CH-V2B(59)(2) (1 to 2) WMMS-30CH-V2B(59)(2) (1 to 2)	WMMS-24CH-V2B(59)(2) (1 to 3) WMMS-36CH-V2B(59)(2) (1 to 3)	WMMS-42CH-V2B(59)(2) (1 to 4)	WMMS-48CH-V2B(59)(2) (1 to 4)	WMMS-60CH-V2B(59)(2) (1 to 5)
B	Inch	21.7	22.75	22.75	22.5	24.75
E	Inch	13.5	13.5	13.5	13.5	16.9

⚠ WARNING

⚠ The installation must be done by trained and qualified service personnel with reliability according to this manual.

⚠ Contact service center if you have any questions, be for or during or after installation, in order to avoid the malfunction or failure due to unprofessional installation.

⚠ Picking up and moving the units, you must be guided by trained and qualified personal, with proper tool.

⚠ Ensure that the recommended clearance is left around the unit, for proper installation, operation and service in the future..

INSTALLATION POSITIONS FOR OUTDOOR UNIT

* To be installed at the position where the air delivered from the unit can reach every comer of the room.
* To avoid being affected by the outdoor air.
* To avoid blockage to the air inlet or outlet of the unit.
* To avoid too much oil smoke or steam.
* To avoid possible generation, inflow, lingering or leakage of flammable gases.
* To avoid high-frequency facilities (such as high frequency arc welders, etc.).
* To avoid the places where acid solutions are frequently used.
* To avoid the places where some special sprayers (sulfides) are frequently used.
* Not to install on top of the musical instruments, TV, computer etc. valuable appliance.
* Not to install a fire alarming device near the air outlet of the unit (during operation, the fire alarm device might be erroneously triggered by the warm air from the unit).

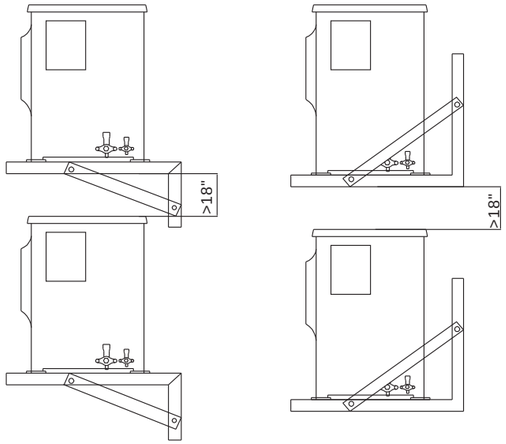
INSTALLATION-OUTDOOR UNIT

INSTALL OUTDOOR UNIT

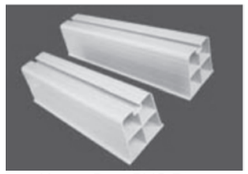
Strongly suggest to install the outdoor unit above the ground either on platform or brackets as shown below.

Heat pump unit must be lift up from ground level, since condensate must be drained out of the drain pan of the condensing unit; othewise, condensate may be iced and built up to damage the condensing unit.

Suggest to use YMGI-provided brackets and condensate drainage fitting accessories.



Other Brackets



Heavy-Duty PVC Riser for Ground Mounting

Coated Brackets W A ccessories

Bracket Accessories

(Actual unit/parts or installation may look differently from the illustrated)

INSTALLATION-OUTDOOR UNIT

INSTALLATION & PICTURES-WALL MOUNT BRACKET FOR OUTDOOR UNIT(S)
(PART VARIES UPON MODELS/AVAILABILITY)

* Select a secured location where the outdoor unit will be installed properly.
* Orient the unit rear side (intake grill) towards wall and front side (discharge grill) away from wall.
* For ground installation, use factory-provided riser and accessories. Not to bolt unit feet directly onto ground. Riser or brackets shall be levelled at outdoor unit foot surfaces. Secure unit foot by tightening bolts, nuts and anti-vibration pads.
* For wall mount installation, use factory-provided brackets, anchors and accessories.

WIRING OUTDOOR UNIT

CONNECT WIRING BETWEEN OUTDOOR UNIT AND INDOOR UNIT

* Check the nameplate for rated electrical data. Connect unit to the correct electrical power source.
* Select power wire of proper type and size. Suggest to use UL approved 105°C/221°F multi-strand copper wire for outdoor use. Refer to the following tables, for proper selection of wire gauge, size and circuit breaker.

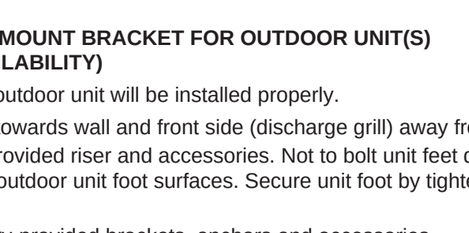
OUTDOOR WIRING: OUTDOOR-INDOOR UNIT & DISCONNECT SWITCH BOX/CIRCUIT BREAKER/FUSE

* Remove the wiring diagram cover where also the handle for moving unit is located.
* Follow the wiring diagrams on the unit or the wiring diagram manual that comes with the indoor unit to get familiar with wiring and make sure nothing is made wrong. If there is any discrepancy, always use the one put in the units.
* Connect wires between indoor unit and outdoor unit-power wire from outdoor to Indoor, control wires from Indoor unit to outdoor unit. Pass wire through certified wire pipes, harnesses and knockouts. Enough length shall be left for future service. Only copper wire is allowed.

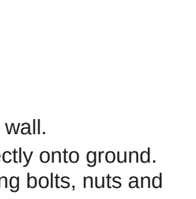
WIRING OUTDOOR UNIT

Strictly follow NEC or state or local codes to select wires, circuit breaker, conduits and to perform installation work.

Bring in line-voltage power input wires from circuit breaker to line-voltage wire terminal block at outdoor unit. Pass through certified wire pipes, harnesses and knockouts. Enough length shall be left for future service. Only copper wire is allowed.



Disconnect switch box for outdoor unit



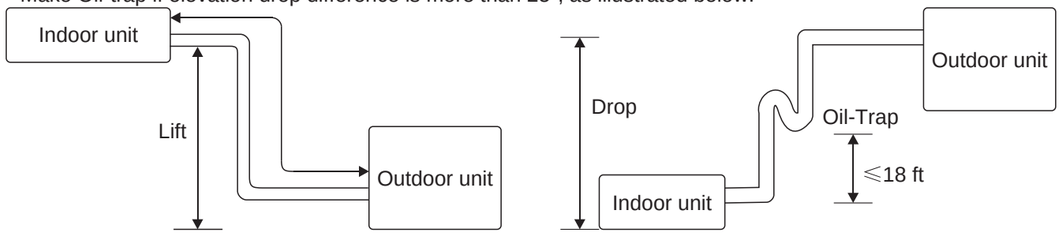
Non-Metalic Power Whip for Outdoor Use (Field-Supplied, Not Spliced and Not Knotted, Water-Proof Sealed Tight, UL Approved)

PIPING AND WIRING SIZES-UNITS MADE AFTER 09/2012

Unit	Connection Copper Pipe Sizes	Min/Max.Length +/- Elevation	Wires from Outdoor to Each Indoor Unit	Mini. Wire Size from Outdoor to Circuit Breaker	HVAC Type Circuit Breaker
21/30CH	2*(1/4+3/8")	15/75/25/35	N(1)/2/3/G	12AWG	30AMP
24/36CH	3*(1/4+3/8")	15/75/25/35	N(1)/2/3/G	10AWG	30AMP
42CH	4*(1/4+3/8")	15/75/25/35	N(1)/2/3/G	10AWG	40AMP
48CH	4*(1/4+3/8")	15/75/25/35	N(1)/2/3/G	8AWG	40AMP
60CH	2*(1/4+3/8")+2*(1/4+1/2") +(1/4+5/8")	15/75/25/35	N(1)/2/3/G	8AWG	50AMP

HEIGHT LIMITS OF INDOOR AND OUTDOOR UNITS

* Either the indoor unit or the outdoor unit can be higher, but the height difference must comply the stated r equirements.
* Try to reduce the bending of the piping line as much as possible so as to avoid possible negative impacts upon the performances of the units.
* Make Oil-trap if elevation drop difference is more than 25", as illustrated below.



Refrigerant Pipe Min/Max. Length, Rise and Drop Height

1,000 Btu/h	Min. Length (Ft.)	Max. Length (Ft.)	Max. Rise Height (Ft.)	Max. Drop Height (Ft.)
09-12	15	50	20	28
18-24	15	75	25	35
30-36	15	100	35	50

ELECTRICAL CONNECTIONS

WMMS-21CH-V2B(59)(2) (1 to 2) / WMMS-30CH-V2B(59)(2) (1 to 2)

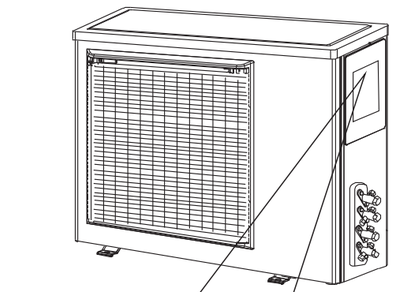
1) Remove the handle at the right side plate of the outdoor unit (one screw).
2) Remove the cable clamp, connect the power connection cable with the terminal at the row of connection and fix the connection. The fitting line distributing must be consistent with the indoor unit. terminal of line bank. Wiring should meet that of indoor unit.
3) Fix power connection wire by wire clamp.
4) Ensure wire has been fastened well.
5) Replace handle when done.

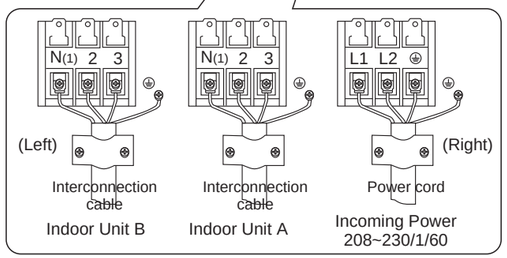
⚠ An all-pole disconnection switch having a contact separation of at least 1/10" all poles should be connected in with wires that are secured to the unit meta structure.

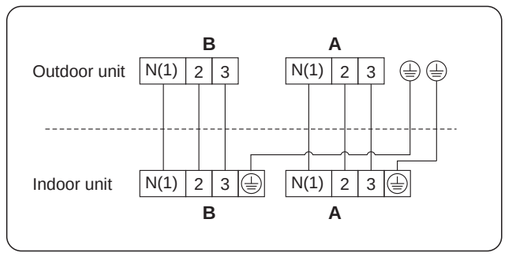
⚠ Wrong wire connection may cause malfunction of some electric components. After fixing cable, ensure that leads between connection to fixed point are well separated..

⚠ The connection pipes and the connectiong wiring of the unit A and unit B must be corresponding to each other respectively.

⚠ The system shall be installed in accordance with NEC.







ELECTRICAL CONNECTIONS

WMMS-24CH-V2B(59)(2) (1 to 3) / WMMS-36CH-V2B(59)(2) (1 to 3)

1) Disassemble the front side plate on the outdoor unit front side plate.(4pc screw).
2) Remove the cable clamp, connect the power connection cable with the terminal at the row of connection and fix the connection. The fitting line distributing must be consistent with the indoor unit. terminal of line bank. wiring should meet that of indoor unit.
3) Fix power connection wire by wire clamp.
4) Ensure wire has been fixed well.
5) Install the front side plate.

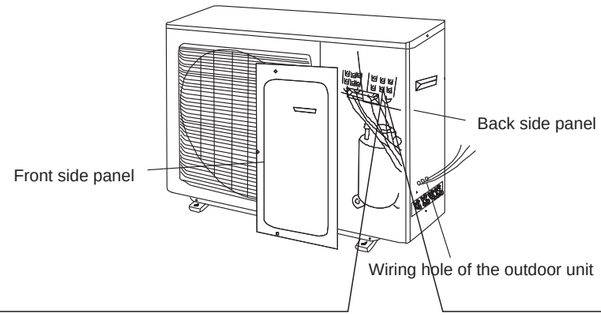
⚠ An all-pole disconnection switch having a contact separation of at least 0.12" in all pole should be connected in fixed wiring.

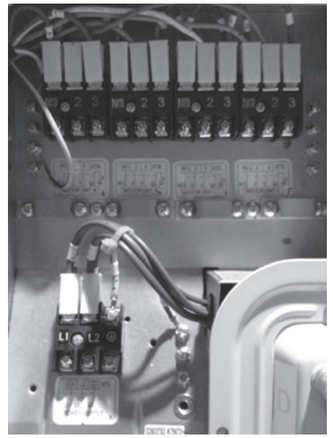
⚠ Wrong wire connection may cause malfunction of some electric components. After fixing cable, ensure that leads between connection to fixed point have some space.

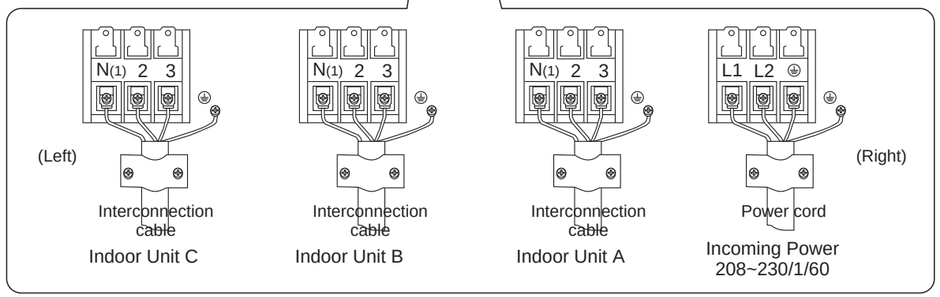
⚠ The connection pipes and the connectiong wirings of the unit A and unit B must be corresponding to each other respective.

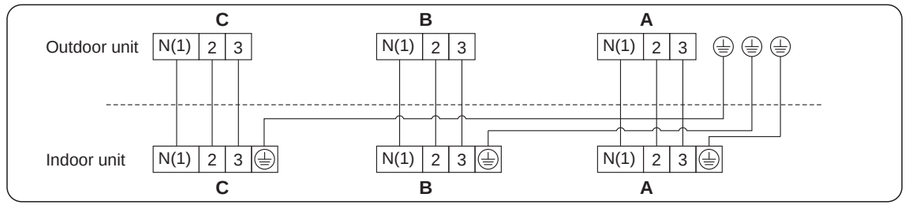
⚠ The appliance shall be installed in accordance with national wiring regulations.

⚠ Do not install the outdoor unit where it is exposed to sunlight.









ELECTRICAL CONNECTIONS

WMMS-42CH-V2B(59)(2) (1 to 4) / WMMS-48CH-V2B(59)(2) (1 to 4)

1) Remove the handle at the right side plate of the outdoor unit (one screw).
2) Remove the cable clamp, connect the power connection cable with the terminal at the row of connection and fix the connection. The fitting line distributing must be consistent with the indoor unit. terminal of line bank. Wiring should meet that of indoor unit.
3) Fix power connection wire by wire clamp.
4) Ensure wire has been fixed well.
5) Install the handle.

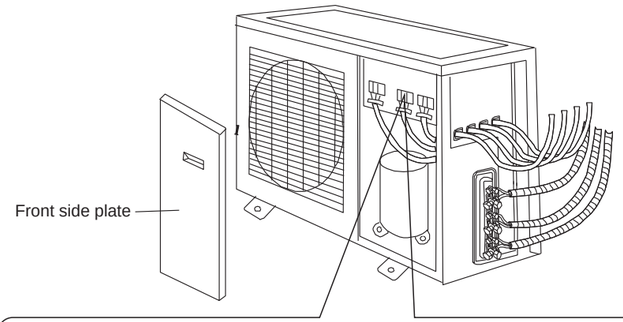
⚠ An all-pole disconnection switch having a contact separation of at least 0.12" in all pole should be connected in fixed wiring.

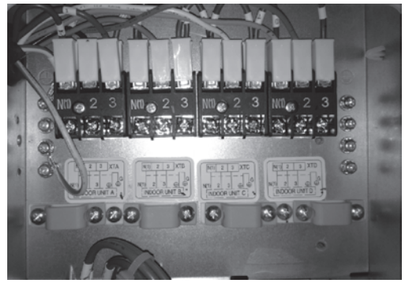
⚠ Wrong wire connection may cause malfunction of some electric components. After fixing cable, ensure that leads between connection to fixed point have some space.

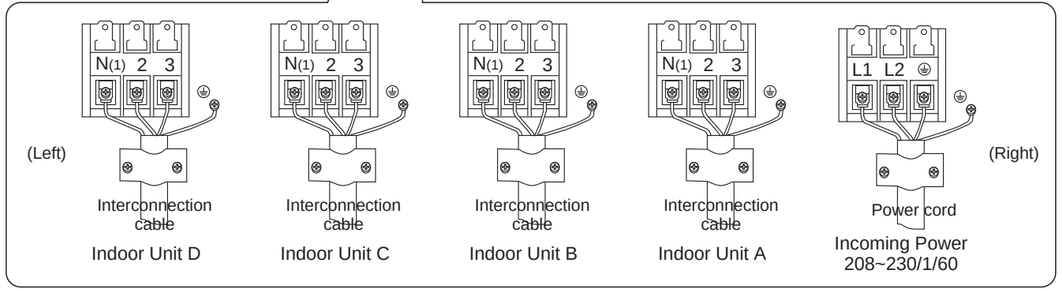
⚠ The connection pipes and the connectiong wiring of the unit A ,unit B and unit C must be corresponding to eachother respective.

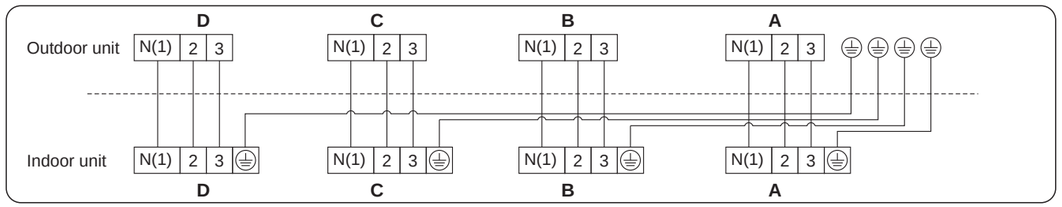
⚠ The appliance shall be installed in accordance with national wiring regulations.

⚠ Do not install the outdoor unit where it is exposed to the sunlight.









ELECTRICAL CONNECTIONS

WMMS-60CH-V2B(59)(2) (1 to 5)

1) Remove the handle at the right side plate of the outdoor unit (one screw).
2) Remove the cable clamp, connect the power connection cable with the terminal at the row of connection and fix the connection. The fitting line distributing must be consistent with the indoor unit. terminal of line bank. Wiring should meet that of indoor unit.
3) Fix power connection wire by wire clamp.
4) Ensure wire has been fixed well.
5) Install the handle.

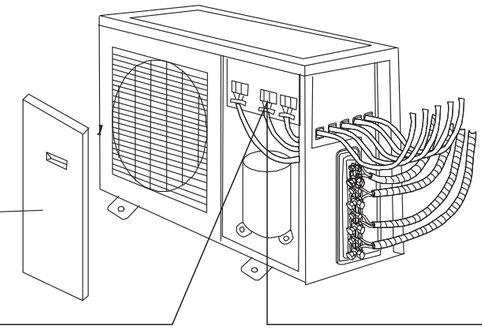
⚠ An all-pole disconnection switch having a contact separation of at least 0.12" in all pole should be connected in fixed wiring.

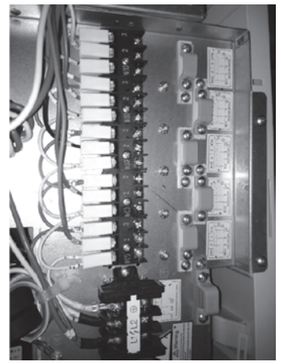
⚠ Wrong wire connection may cause malfunction of some electric components. After fixing cable, ensure that leads between connection to fixed point have some space.

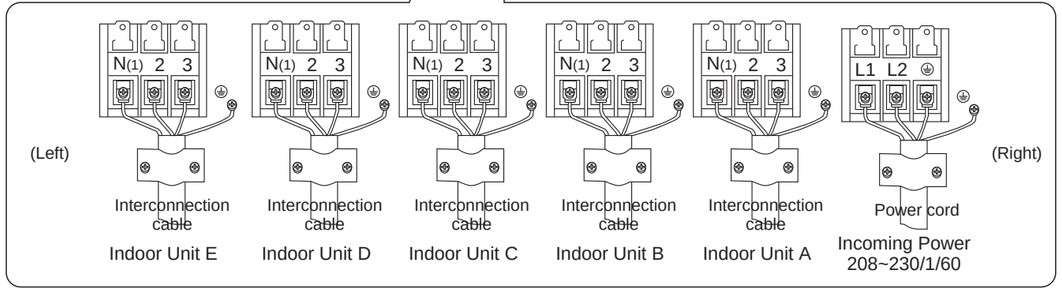
⚠ The connection pipes and the connectiong wiring of the unit A, unit B, unit C and unit D must be corresponding to eachother respective.

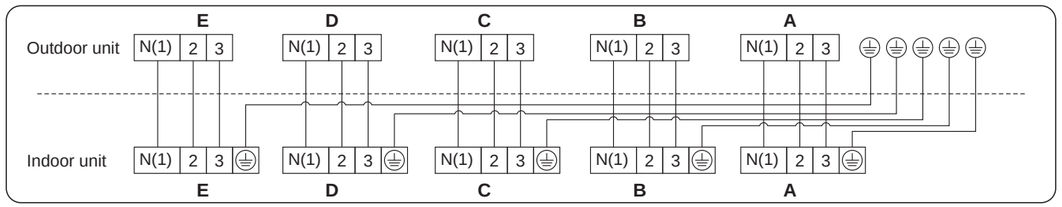
⚠ The appliance shall be installed in accordance with national wiring regulations.

⚠ Do not install the outdoor unit where it is exposed to the sunlight.



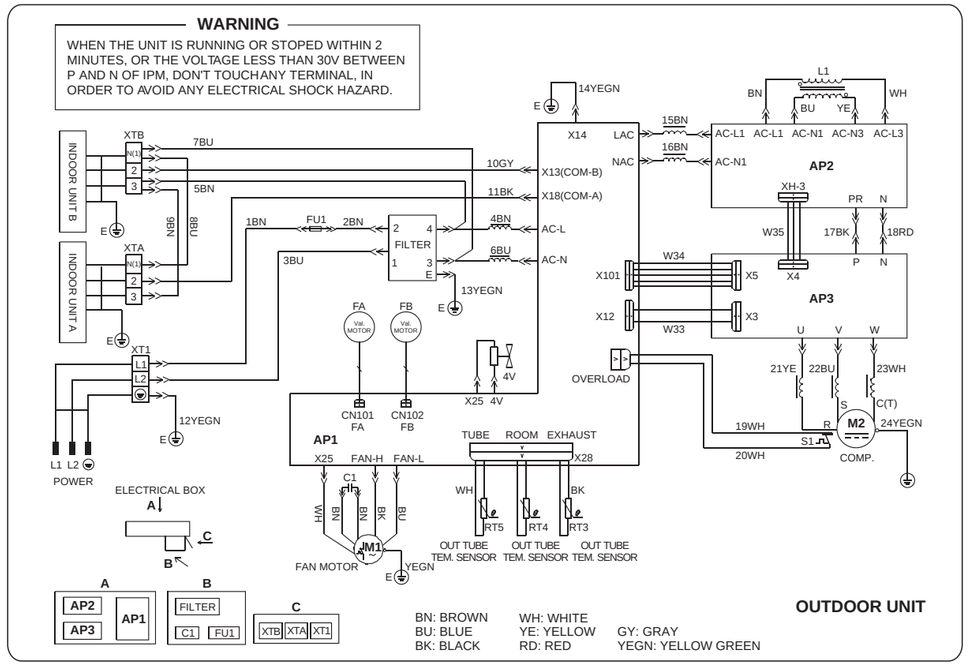




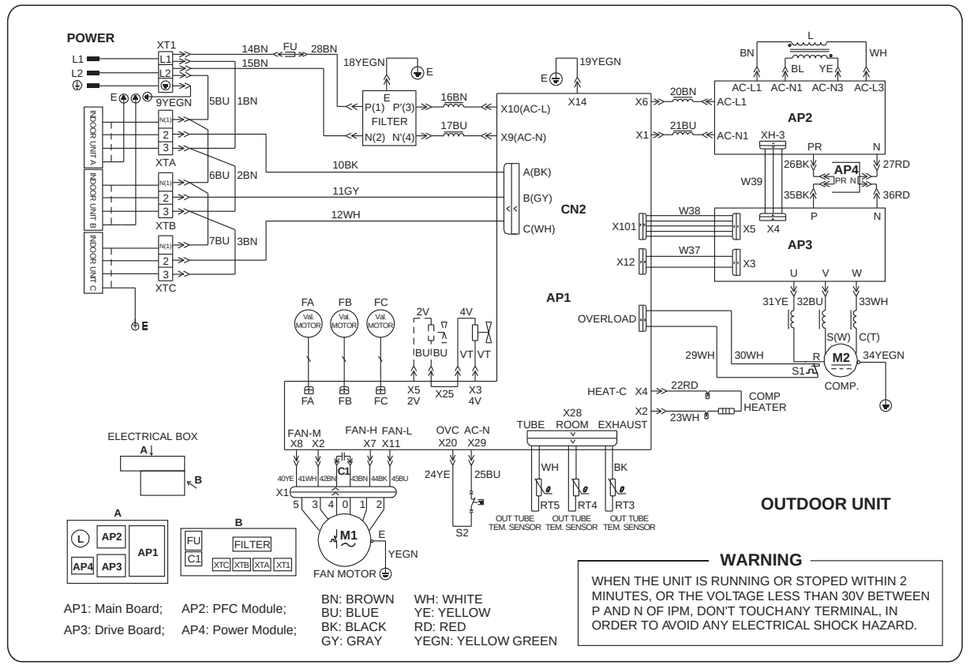


WIRING DIAGRAMS

WMMS-21CH-V2B(59)(2) (1 to 2) / WMMS-30CH-V2B(59)(2) (1 to 2)

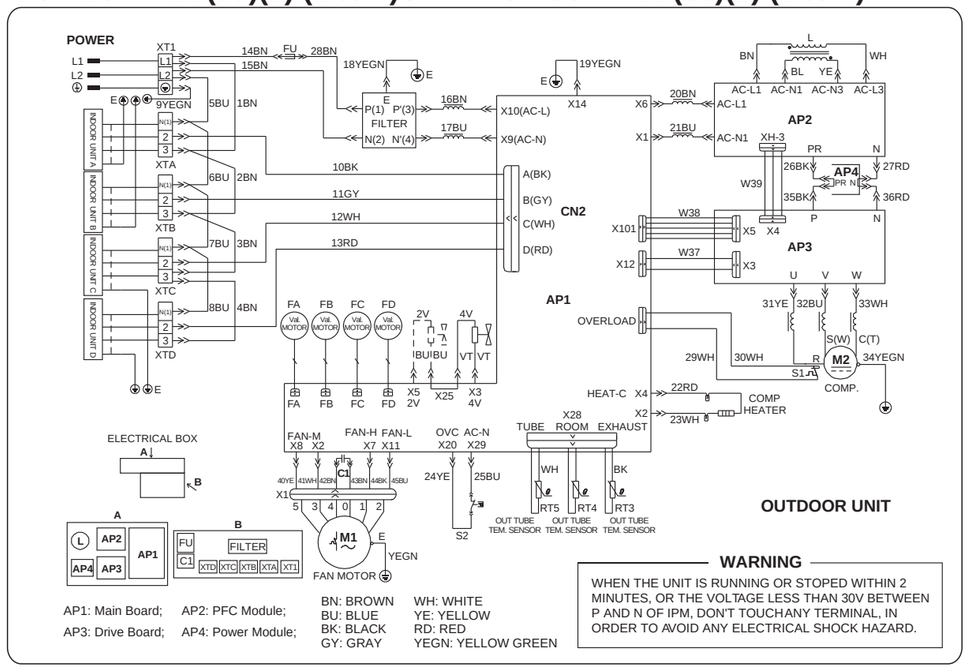


WMMS-24CH-V2B(59)(2) (1 to 3) / WMMS-36CH-V2B(59)(2) (1 to 3)

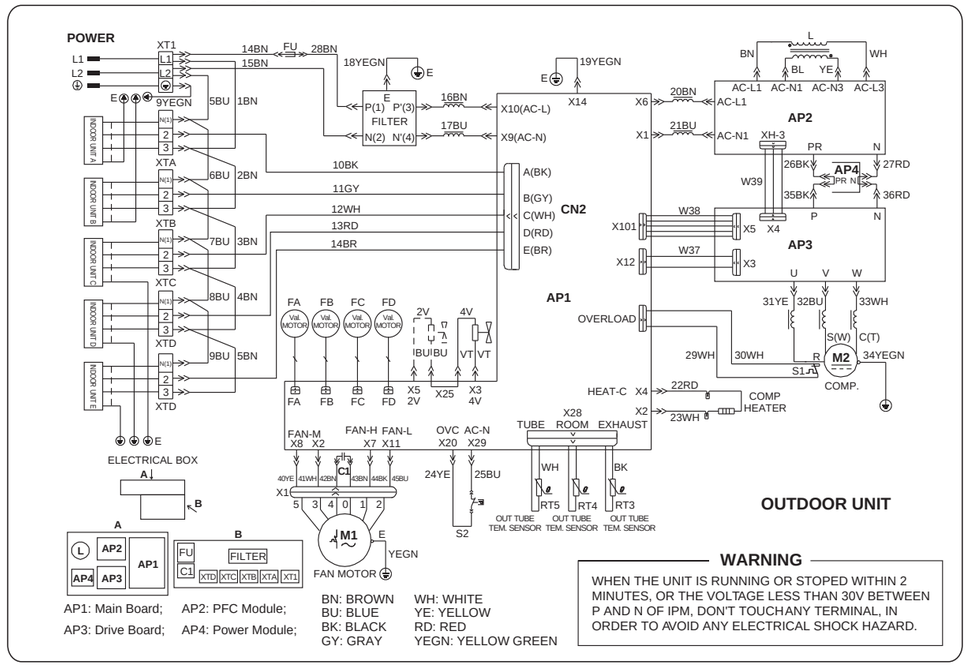


WIRING DIAGRAMS

WMMS-42CH-V2B(59)(2) (1 to 4) / WMMS-48CH-V2B(59)(2) (1 to 4)

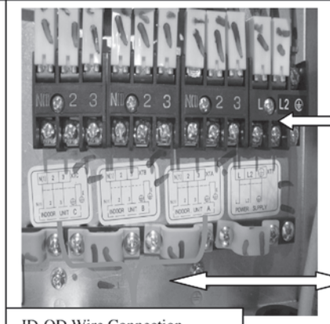


WMMS-60CH-V2B(59)(2) (1 to 5)



NOT TO CROSS-WIRING & NOT TO CROSS-PIPING

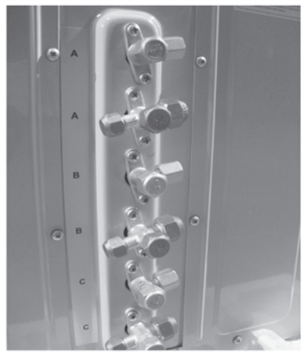
Not to Cross-Wiring, Not to Cross-Piping **Between Any Two Zones**
Mini Split-DC Inverter Multiple Zones-(59 Series)-(A-A B-B C-C D-D)



Power Cable from Disconnect Switch Box to Connect to Outdoor Unit Terminal Block: L1/L2/G 208-230/1160

Wires to Go Between Each Indoor Unit and the Outdoor Unit, Connects at N(1)/2/3, One-on-one Match: A-A, B-B, C-C, D-D, Whichever available

ID-OD Wire Connection Terminal Blocks D, C, B, A



Piping: Need to ensure the liquid/gas lines from indoor unit A are connected to the valves on outdoor unit marked A/A, respectively.

Also, make sure liquid/gas lines from indoor unit B are connected to the valves on outdoor unit marked B/B, respectively.

...

Same matching on C-C, Whichever D-D, Available

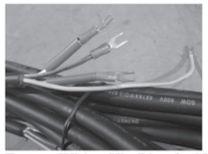
Warning: Since there are multiple electronic expansion valves built inside the outdoor unit, with one (1) for each indoor unit, wiring and piping for each indoor unit, need to match with the corresponding wiring terminals and valves for that specific indoor unit. NOT to Cross Pipe, Not to Cross Wire, between any two indoor units.
All manufacturer warranty will be voided in case of any cross-piping or cross-wiring installation. Manufacturer or Distributor(s) WILL NOT be responsible for any direct or indirect damage/loss caused by such prohibited installation.

Negative Consequences of Cross-Wiring/Piping between Any Two Zones:

1. The other compressor may work to pump refrigerant into another connected indoor unit, when one indoor unit is called for either cooling or heating.
2. Will not have any conditioned air blown out of the indoor unit you are calling for either cooling or heating.
3. May freeze (at cooling) or heat up (at heating) the other indoor unit;
4. May damage compressors or other refrigeration components;
5. May cause electrical surge;
6. May damage the whole unit;
7. May cause other consequential damages;
8. Will void manufacturer warranty;
9. The installers MUST take full responsibilities by doing so.

This 3/8"-1/4" reducer, may be needed to connect ceiling ID, or 18K wall mount ID units

This white fitting can be connected to the bottom of outdoor unit base pan, of heat pump models, if you would like to drain the condensate, which will be generated during heat pump defrost cycle, to somewhere you designate to. (Attention: Must install the Heat Pump outdoor unit onto a foot riser (RIST) or bracket (BRKT), so that the base pan can be at least 4 inches above the ground level, and is clear from any blockage, and can keep from possible ice to build up, in cold days.

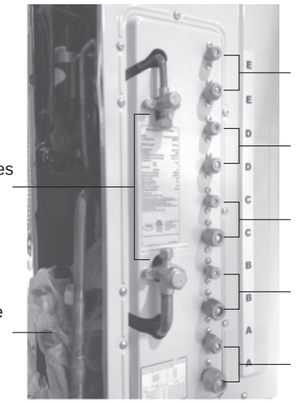


Factory Wiring Kit: Blue for N(1) Black for 2, Brown for 3 Green goes to metal ground screw.

May put these wire grommet onto the knock-out on the cabinet.

Important: Must follow the piping length suggestion listed on the product specification sheet, and/or installation manual. Must thoroughly check all functions at each system first, before putting any two systems, three systems, four systems, and so on, together to run.

NOT TO CROSS-WIRING & NOT TO CROSS-PIPING


Service Valves for All Indoor Units
Adaptors for outdoor valve or indoor connections, if needed.
Indoor Unit E 1/4" 3/8"
Indoor Unit D 1/4" 3/8"
Indoor Unit C 1/4" 1/2"
Indoor Unit B 1/4" 1/2"
Indoor Unit A 1/4" 5/8"

⚠ WARNING

Not to cross-wiring, Not to cross-wiring between any 2+ zones.

CONNECT REFRIGERANT PIPES

Seal Copper Line Set/Wire Cable/Drain Hose Line Combination:

* Use factory-recommended components, as briefly illustrated below.
* Cover line set in a sequence, either from indoor to outdoor, or the other way.
* Secure line set covers onto the wall using factory-recommended accessories.

INSTALLATION OF ACCESSORIES

LINE SET COVERS

⚠ CAUTION Not to damage line sets.

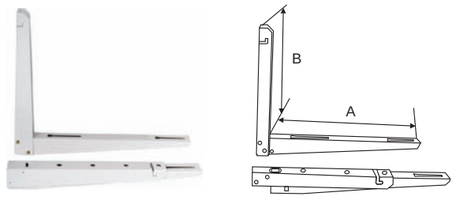
INLTS STRT COUP COUP-H OFST ELBF90° ELBF45° SOFT TEE ENDF RDER

OUTDOOR UNIT FOOT RISER OR BRACKETS

BRKT-XXXX-SC1

* Made of steel.
* Coated with weatherproof polyester powder.

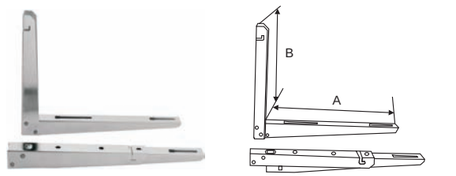
Model	Size(Inch)		Capacity	
	A	B	LBs	Btu/h
BRKT-0918-SC1	17.7	15.4	320	09K-18K
BRKT-1860-SC1	21.7	18.3	360	18K-60K



BRKT-XXXX-ST1

* Made of stainless steel.

Model	Size(Inch)		Capacity	
	A	B	LBs	Btu/h
BRKT-0918-ST1	17.7	15.4	320	09K-18K
BRKT-1860-ST1	21.7	18.3	360	18K-60K



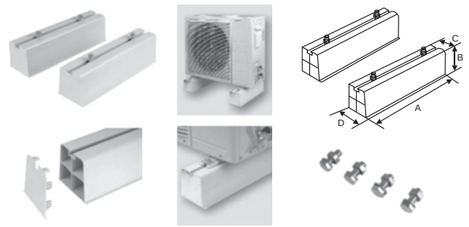
RIST-XXXX-PVC

Foot Riser

Accessories: End Caps (Optional)

* Shock-proof PVC, Weatherproof & UV resistant.
* Supplied with fastening screws and anchor bolts.
* Easy to install.
* The "honeycomb" structure acts as an anti-vibration & humming absorption for a quite operation.

Model	Size(Inch)				Capacity	
	A	B	C	D	LBs	Btu/h
RIST-0918-PVC	14.2	3.7	3.1	4.1	220	09K-18K
RIST-1860-PVC	17.7	3.7	3.1	4.1	260	18K-60K

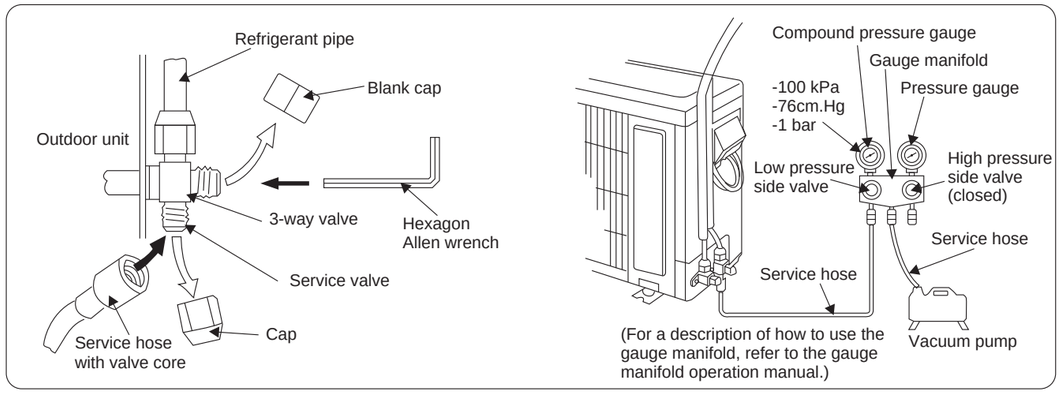


VACUUM AND LEAKAGE CHECK

VACUUM REFRIGERANT PIPES

Evacuate the pipes between indoor and outdoor units, using vacuum pump and manifold/gauge set, to a minimum of 500 microns (service valves remain front seated). Hold for 30 minutes to check if the vacuum level is maintained. Using dry nitrogen or other leakage detection tool for leak checking. Be certain there is no pressure in the system when repairing a leak.

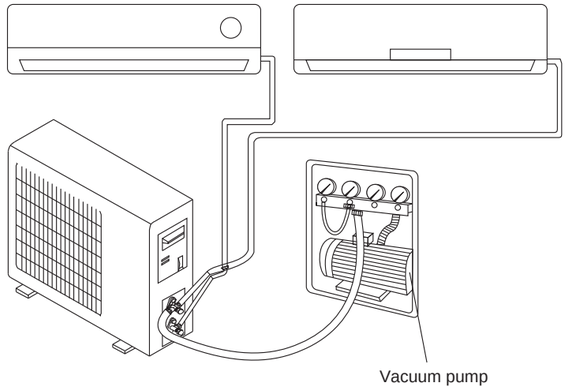
Vacuum and Check Leakage before Releasing Refrigerant from Outdoor Unit to Indoor Unit

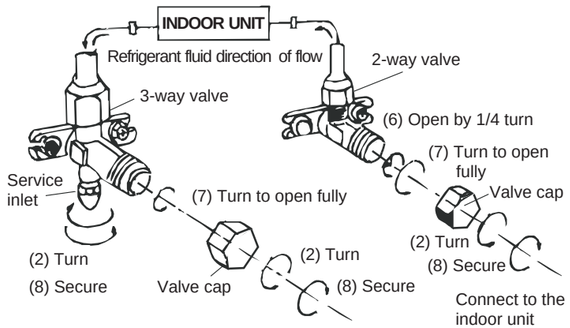


VACUUM

Humid air left inside the refrigerant circuit can cause compressor malfunction and failure. After having connected the indoor and outdoor units, the air and humidity from the refrigerant circuit using a vacuum pump.

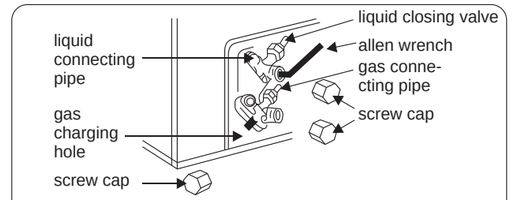
1) Unscrew and remove the caps from the 2-way and 3-way valves.
2) Unscrew and remove the cap from the service valve.
3) Connect the vacuum pump hose to the service valve.
4) Operate the vacuum pump for 10-15 minutes until an absolute vacuum of 500 micron has been reached.
5) With the vacuum pump still in operation, close the low-pressure knob on the vacuum pump coupling.
   Stop the vacuum pump.
6) Open the 2-way valve by 1/4 turn and then close it after 10 seconds. Check all the joints for leaks using liquid soap or an electronic leak device.
7) Turn the body of the 2-way and 3-way valves. Disconnect the vacuum pump hose.
8) Replace and tighten all the caps on the valves.





RELEASE REFRIGERANT FROM OUTDOOR TO THE INDOOR UNIT

Unit is pre-charged with refrigerant good for 25' of connection tubes. If vacuum is held for about 30 minutes and no leak is found, first back-seat the liquid (smaller) service valve by Allen Wrench (hex head) slowly to release pre-charged refrigerant from the condensing unit into the connection pipes and indoor unit. If no abnormal things are found, fully open liquid (smaller) and gas (bigger) service valves. Always replace and tighten the caps onto service valves.



Releasing Refrigerant from Outdoor Unit to Connected Pipes and Indoor Unit

SYSTEM INSPECTION AND TRIAL RUNNING

CHECK SYSTEM THOROUGHLY

Check system thoroughly to make sure the unit is ready for trial running: check wires and pipes and air intake and discharge and power and thermostat and others necessary components.

ADJUST REFRIGERANT-GUIDELINE

Right amount of refrigerant is very important. It is one of the basics to ensure unit a safe operation over time.

Normally single zone outdoor unit is pre-charged with refrigerant for 25ft inter-connecting copper (liquid) line. Multiple zone outdoor unit is pre-charged for various length of copper (liquid) lines of allowed quantity of indoor units, following specs. or engineering submittal.

For single zone unit or multiple zone multiple compressor unit, normally the outdoor unit is pre-charged for 25ft line sets. If the copper line is longer or shorter than 25ft, need to add or deduct refrigerant, following general rule of thumb for rough adjustment:
1/4" liquid line unit: 0.3 Oz/ft; 3/8" liquid line unit: 0.4 OZ/ft; 1/2" liquid line unit: 1.2 OZ/ft.

For multiple zone one compressor unit, if the copper line is longer or shorter than the length at which pre-charged refrigerant is good for, as listed in the engineering submittal or related labels or tables, need to add or deduct refrigerant, following 0.23 OZ/ft rule of thumb for rough adjustment.

In all situations, the minimum copper line (liquid or gas) length for each indoor unit is 15ft.

For a better adjustment, may combine above guideline with the indoor or outdoor (ambient) temperature-refrigerant pressure chart, or generally 8-12F super-heat method.

		Model	WMMS-21CH-V2B(59)(2) WMMS-30CH-V2B(59)(2)		WMMS-24CH-V2B(59)(2) WMMS-36CH-V2B(59)(2)			WMMS-42CH-V2B(59)(2)				WMMS-48CH-V2B(59)(2)				WMMS-60CH-V2B(59)(2)				
Valve sizes at outdoor unit	Liquid valve	In.	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
	Gas valve	In.	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	1/2	1/2	5/8
Max. pipe length (add up length of all liquid lines only), if not upper sizing pipes		Ft.	120		200			230				260				300				
Max. installed indoor and outdoor unit elevation difference	Outdoor unit is installed below the indoor unit	Ft.	15		25			30				30				30				
	Outdoor unit is installed above indoor unit	Ft.	25		25			30				30				30				
Max. pipe length, if not adjusting factory pre-charged refrigerant		Ft.	60 (add up length of all liquid lines only)		100 (add up length of all liquid lines only)			100 (add up length of all liquid lines only)				130 (add up length of all liquid lines only)				130 (add up length of all liquid lines only)				
Minimum pipe length (for each indoor unit)		/	15ft																	
Refrigerant charge adjustment, if actual length is different from the number in the line above		+- Oz/Ft	0.23																	

* Adjust refrigerant charge, following instructions, if the actual installation elevation difference is different from 7' and length is different from the listed numbers above.
* Any indoor unit is 30' or more apart from the outdoor unit, better to adjust refrigerant. If it is 50' or more apart, better to upper size the copper lines and adjust refrigerant.
* Any run can not be more than 100' apart from the outdoor unit; otherwise, that indoor unit 's capacity may be decreased too much.

INSTALLATION INSTUCTIONS

SYSTEM INSPECTION AND TRIAL RUNNING

PRESSURE TABLES

System pressure checking should be a must-do job during trial running of initial installation, and compressor/refrigerant-related trouble-shooting. It is a more accurate refrigerant adjusting method than rough refrigerant addition or deduction guideline shown above.

In some cases, if the service valve on unit is 5/16” and your service valve connection is 1/4”, need to use a 5/16”-1/4” adaptor so that you can connect to your manifold. Need to pay attention to use the right manifold that is rated for the refrigerant in the unit, and pay attention to connect to the right hose (blue hose for low pressure, red hose for high pressure, yellow hose for vacuum or charging or deduction). Not recommend to put hose onto service valve while compressor is running. Remove hose quickly and carefully to avoid air suck-in, refrigerant leakage, or any refrigerant-freezing burn.

The following curves are only reference for system pressure checking. Actual pressures may vary upon many factors such as inter-connecting pipe length, refrigerant charge / leakage level, elevation difference between indoor unit and outdoor unit, tool calibration, reading error, and so on.

Reference Temperature-Pressure Table (Split Condensing Unit-R410A AC)
Product Series: YMGI Group-Mini Split Version: 01/11/2010

Outdoor Dry-Bulb (F)	15	25	35	50	55	60	67	75	82	90	95	100	105	110	115
Outdoor Dry-Bulb (C)	-9.4	-3.9	1.7	10.0	12.8	15.6	19.4	23.9	27.8	32.2	35.0	37.8	40.6	43.3	46.1
Outdoor Wet-Bulb (F)	13.6	23.0	30.2	42.8	46.9	51.1	59.5	66.6	64.9	71.2	75.0	79.0	82.9	86.9	90.7
Outdoor Wet-Bulb (C)	-10.2	-5	-1.0	6.0	8.3	10.6	15.3	19.2	18.3	21.8	23.9	26.1	28.3	30.5	32.6
Indoor Dry-Bulb	80F (26.7C)														
Indoor Wet-Bulb	67F (19.4C)														
Discharge-PSI/F	74/21.2	84/27.1	105/35.1	115/38.5	125/42.8	130/45.5	140/48.2	146/51.2	156/54.3	166/57.5	175/61.2	180/62.5	186/63.7	189/64.5	191/64.9
Suction-PSI/F	60/46.2	70/53.5	85/55.2	92/55.7	98/56.1	103/56.7	110/56.9	115/57.1	120/57.5	128/57.8	135/57.9	136/58.6	137/59.1	139/59.3	140/59.5

Suggest to Add on Low Ambient Control, If Still in Need of AC for Long Time In Cold Weather. Closely Check/Watch Refrigerant Charge Level.

Warning: R410A refrigerant bears higher pressures than R22. Only handled by Licensed HVAC technician.

Reference Temperature-Pressure Table (Split Condensing Unit, R410A-Heat Pump)
Product Series: YMGI Group-Mini Split System Version: 01/11/2010

Outdoor Dry-Bulb (F)	0	5	10	17	25	30	35	40	45	47	55	62
Outdoor Dry-Bulb (C)	-17.8	-15	-12.2	-8.3	-3.9	-1.1	1.7	4.4	7.2	8.3	12.8	16.7
Outdoor Wet-Bulb (F)	-0.8	4.1	8.8	15	22.8	27.5	28.9	36.3	41.0	43.0	50.4	56.5
Outdoor Wet-Bulb (C)	-18.2	-15.5	-12.9	-9.4	-5.1	-2.5	-1.7	2.4	5	6.1	10.2	13.6
Indoor Dry-Bulb	70F (21.1C)											
Indoor Wet-Bulb	60F (15.6C)											
Discharge-PSI/F	260/84	269/90	284.5/95	290/102	296/111	304/128	304/133	330/138	345/142	354/149	400/149	440/176
Suction-PSI/F	246/72	255/78	270/86	278/89	285/92	290/95	310/98	318/100	330/102	340/104	380/107	425/113

CHECK AFTER INSTALLATION AND TEST OPERATION

CHECK AFTER INSTALLATION

Items to be checked	Possible Problems or Consequences
Has the been unit positioned firmly?	The unit may drop, shake or emit noise.
Have you done the refrigerant leakage test?	It may cause insufficient cooling(heating) capacity.
Is heat insulation sufficient?	It may cause unexpected condensate and dripping.
Is drainage pipe tested ?	It may cause leakage or unexpect dripping.
Is the voltage in accordance with the rated voltage marked on the nameplate?	It may cause electric malfunction or damage to the part/unit.
Is the electric wiring and piping connection installed correctly and securely?	It may cause electric malfunction or damage to the part/unit.
Has the unit been connected to a secure earth connection?	It may cause electrical leakage.
Is the power cord specified properly per NEC codes ?	It may cause electric malfunction or damage to the part/unit.
Is the air inlet and outlet been cleared?	It may cause insufficient cooling(heating) capacity, and unexpected noise.
Has the refrigerant pressure been checked or refrigerant been adjusted accordingly?	It may generate unexpected noise, freezing pipe, capacity issues, compressor or system damage or even worse.
Has the installing technician filled all the fields in the checklist inside the warranty registration card?	If not filed or not filled completely or correctly, your factory warranty may not be qualified.

TEST OPERATION

1. Before test operation

(1) Do not turn on power before installation is finished completely.

(2) Electric wires must be connected correctly and securely.

(3) Cut-off valves of the connection pipes should be back seated/tunned on.

(4) All the impurities such as scraps and thrums must be cleared out of the unit.

2. Test operation method

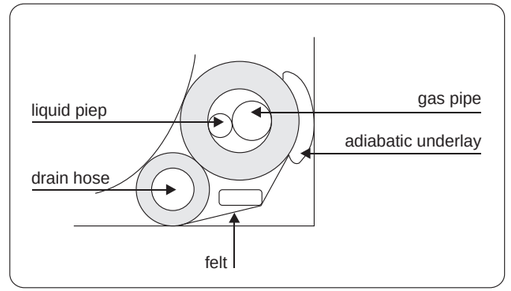
(1) Switch on power, press "ON/OFF" button on the wireless remote control to start the operation

(2) Press MODE button, to select the COOL, HEAT (not available for cooling only unit is), FAN and so on to check :

* All the functions (to make sure the unit functions correctly and poroenty).
* Refrigerant (pressures/temperatures at sericea values/pipes should be good).
* Drainage (condensate/water flow should be dripping out of drainage pipe ONLY).
* Noise (there should be no abnormal symbol)

FINISH INSTALLATION

1) Put back all covers, screws removed during installation and start-up.
2) Properly note, mark, organize and secure wires.
3) Caulk the opening to weatherproof level at opening frame both inside and outside.
4) Do a final visual inspection.
5) Teach or instruct owner or users how to correctly operate the system and answer their questions.
6) Check against all items in Product/Warranty Registration Card and sign it for the owner.



FAULT INDICATION

D101	Meaning	D102	Meaning	D103	Meaning
Blink once	Compressor operates	Blink once	Air exhaust protection frequncy limit	Blink once	Air exhaust protection frequency limit
Twice	Compressor high pressure protection unit stop	Twice	Cooling overload frequncy reducing	Twice	Cooling overload frequncy limit
Three times	Air exhaust protection unit stop	Three times	Over current protection frequency reducing	Three times	Over current protection frequency limit
Four times	Communication malfunction unit stop (Include indoor unit and driver)	Four times	Phase current protection frequncy reducing	Four times	Phase current protection frequncy limit
Five times	IPM modular protection unit stop	Five times	Heating A unit anti-high temperature frequncy reducing	Five times	Heating A unit anti-high temperature frequncy limit
Six times	Over current protection unit stop	Six times	Heating B unit anti-high temperature frequncy reducing	Six times	Heating B unit anti-high temperature frequncy limit
Seven times	Cooling overload unit stop	Seven times	Heating C unit anti-high temperature frequncy reducing	Seven times	Heating C unit anti-high temperature frequncy limit
Eight times	Each indoor unit starts heating at same time anti-high temperature protection unit stop	Eight times	Heating D unit anti-high temperature frequncy reducing	Eight times	Heating D unit anti-high temperature frequncy limit
Nine times	Each indoor unit anti-freezing protection at same time unit stop	Nine times	Defrosting	Nine times	Oil return
Ten times	Outdoor unit temp. sensor malfunction or each indoor unit temp. sensor malfunction unit stop				
Eleven times	Compressor overload protection unit stop				
Twelve times	Compressor low-pressure protection unit stop (preserved)				
Thirteen times	Phase current protection unit stop				
Fourteen times	E2 PROM Error unit stop				
Fifteen times	DC power supply short circuit				
D104	**Meaning**	**D105**	**Meaning**	**D106**	**Meaning**
Blink once	Outdoor ambient temp. sensor malfunction	Blink once	A unit communication malfunction (cannot receive correct data within 3mins.)	Blink once	B unit communication malfunction (cannot receive correct data within 3mins.)
Twice	Outdoor tube temp. sensor malfunction	Twice	A unit indoor middle temp. sensor malfunction	Twice	B unit indoor middle temp. sensor malfunction
Three times	Outdoor air exhaust temp. sensor malfunction	Three times	A unit indoor outlet pipe temp. sensor malfunction	Three times	B unit indoor outlet pipe temp. sensor malfunction
Four times	Communication malfunction with driver (cannot receive correct data from driver within 10s)	Four times	A unit indoor inlet pipe temp. sensor malfunction	Four times	B unit indoor inlet pipe temp. sensor malfunction
		Five times	A unit indoor ambient temp. sensor malfunction	Five times	B unit indoor ambient temp. sensor malfunction
		Six times	A unit modes conflict	Six times	B unit modes conflict
		Seven times	A unit anti-freezing protection	Seven times	B unit anti-freezing protection
		Eight times	A unit anti-high temp. protection	Eight times	B unit anti-high temp. protection
D107	**Meaning**	**D108**	**Meaning**	**D109**	**Meaning**
Blink once	C unit communication malfunction (cannot receive correct data within 3mins.)	Blink once	D unit communication malfunction (cannot receive correct data within 3mins.)	Blink once	Received communication data proof test correct will flash once
Twice	C unit indoor middle temp. sensor malfunction	Twice	D unit indoor middle temp. sensor malfunction		
Three times	C unit indoor outlet pipe temp. sensor malfunction	Three times	D unit indoor outlet pipe temp. sensor malfunction		
Four times	C unit indoor inlet pipe temp. sensor malfunction	Four times	D unit indoor inlet pipe temp. sensor malfunction		
Five times	C unit indoor ambient temp. sensor malfunction	Five times	D unit indoor ambient temp. sensor malfunction		
Six times	C unit modes conflict	Six times	D unit modes conflict		
Seven times	C unit anti-freezing protection	Seven times	D unit anti-freezing protection		
Eight times	C unit anti-high temp. protection	Eight times	D unit anti-high temp. protection		

MAINTENANCE

⚠ Use proper instruments for the refrigerant R410A.

⚠ Do not use any refrigerant other than R410A.

⚠ Do not clean the unit using mineral oil.

WARRANTY AND TECH. SUPPORT

YMGI warrants to the purchaser/owner(s) that YMGI products be free from defects in material and workmanship under the normal use and maintenance, with the standard Limited Product Warranty Policies that comes with the unit or sales package.

YMGI IS NOT RESPONSIBLE FOR

* Damage or repairs required as a consequence Customer do-it-yoursely(DIY) installation and/or any other faulty installation or improper application.
* Damage or repairs needed as a consequence of any misapplication, abuse, improper servicing, unauthorized alteration, or improper operation.
* Damage as a result of floods, winds, fires, lightening, accidents, corrosive atmosphere, or other conditions beyond the control of YMGI.
* Any damages to person or property of whatever kind, direct or indirect, special or consequential, whether resulting from use or loss of use of the product.
* Failure to start due to voltage conditions, blown fuses, open circuit breakers, or other damages due to the inadequacy or interruption of electrical service.
* Parts not supplied or designated by YMGI.
* Products installed outside USA or Canada.
* Regular equipment maintenance or field service or field inspection.
* Any problems due to improper cooling and heating load calcuation of the room/building the air conditioner/heat pump system is to be installed. Equipment users can get the calculation schedule from your room/building architect or your installation or related service HVAC contractor, who should have knowledge and tools to do these calculation correctly.
* Any problems due to improper sizing and selecting air conditioner/heat pump system. These equipment sizing and selection work should be conducted by either your room/building architect or your installation or related service HVAC contractor, who should have knowledge and tools to do these calculation correctly, and get your approval, before your purchasing these air conditioner or heat pump equipment.
* Any problems due to improper installing of the air conditioner/heat pump system. Installation should be conducted by currently licensed HVAC technician, following manufacturer installation instructions, all governing safety codes, with care and professionalism.
* Any problems due to improper operation of the air conditioner/heat pump system. Users shall keep the manual and look up in the manuals for the correct understanding how the unit will work and how to operate the unit correctly.
* Any problems due to improper maintenance of the air conditioner/heat pump system. Like a car, regular maintenance or yearly checking is necessary for the unit to work properly for you, before the season comes. For example, air filter shall be checked for cleaness from time to time. Remote control batteries shall be checked for enough power, before judging the unit is not working...

CONTACT FOR FIELD SERVICE OR REPAIR

The following people, in a prioritized sequence, will take care of your request or issue:

1) The original installer; otherwise,
2) Your current service contractor; otherwise,
3) Authorized contractor in YMGI list that is close to you; otherwise,
4) Authorized Distributor in YMGI Distributor list; otherwise,
5) Contractor/Distributor you prefer who is close to you.

CONTACT FOR GENERAL TECHNICAL QUESTIONS OR SUPPORT, IN A SEQUENCE:

1) The original installer; otherwise,
2) The current service contractor; otherwise,

   The original licensed installer or current service contractor should be contacted first of all, since they installed the unit and/or know more details than anybody else.

   They will check the unit and find out the problems with the professional knowledge about HVAC and electric product installation by using special tools or instrument.

   They can contact YMGI technical support for technical help during unit installation or inspection.

   Product model and serial numbers needed, which can be found on unit nameplate sticker, so that our technician can quickly identify the unit, parts and wiring diagrams, among our many products and models.
3) The distributor; where the unit is purchased from otherwise,
4) YMGI Technical Support:
   Tel: (866) 833-3138*703 Email: techsp@ymgigroup.com

USER NOTES AND SERVICE LOG

USER NOTES

Put down whatever questions you have or problems you have seen as a unit history:

No.	Date	Questions or Problems	Remarks

SERVICE/MAINTENANCE LOG

Put down whatever questions you have or problems you have seen as a unit history:

No.	Date	Service/Maintenance Conducted	Person/Phone

MEMO

WARRANTY INFO. & CUSTOMER SUPPORT